Nos. 97-826, 97-829, 97-830, 97-831, 97-1075, 97-1087, 97-1099, and 97-1141

IN THE

Supreme Court of the United States

OCTOBER TERM, 1997

AT&T CORP., et al.,

Petitioners,

IOWA UTILITIES BOARD, et al.,

Respondents.

AT&T CORP., et al.,

Petitioners,

CALIFORNIA, et al.,

Respondents.

On Writs of Certiorari to the United States Court of Appeals for the Eighth Circuit

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FEDERAL COMMUNICATIONS COMMISSION

No. 96-98

IMPLEMENTATION OF THE LOCAL COMPETITION PROVISIONS IN THE TELECOMMUNICATIONS ACT OF 1996

RELEVANT DOCKET ENTRIES

Date	PROCEEDINGS
04/19/96	DOC TYPE: NPRM APPL: COMMON CARRIER BUREAU LAW FIRM: FCC RELEASE/DENIED
08/01/96	DOC TYPE: R&O APPL: COMMON CARRIER BUREAU LAW FIRM: FCC RELEASE/DENIED: 08/08/96 FCC/DA#: 96- 325
08/08/96	DOC TYPE: R&O APPL: COMMON CARRIER BUREAU LAW FIRM: FCC RELEASE/DENIED: 08/08/96 FCC/DA#: 96- 333
08/18/97	DOC TYPE: ORDER APPL: COMMON CARRIER BUREAU LAW FIRM: FCC RELEASE/DENIED: 08/18/97 FCC/DA#: 97- 295

UNITED STATES COURT OF APPEALS FOR THE EIGHTH CIRCUIT

No. 96-3321

IOWA UTILITIES BOARD

V.

FCC

RELEVANT DOCKET ENTRIES

Date

PROCEEDINGS

PETITION for Review of an order of the FCC
Consolidation Order issued by Judicial Panel on Multidistrict Litigation: Eighth Circuit designated to hear petitions for review from District of Columbia, Second, Fifth, Sixth and Eighth Cir- cuits.
ARGUED in Kansas City on Motion for Stay to Judges Pasco M. Bowman, Roger L. Wollman, David R. Hansen. William P. Barr for Petitioners, the Local Exchanges. Diane C. Munns for Petitioners, the State Utility Boards; Christoper J. Wright for Respondent, FCC & USA; David W. Carpenter for proposed Intervenors, the Telecommunications carriers. Rebuttal by Mr. Barr and Ms. Munns.
JUDGE ORDER: Having concluded that the petitioners satisfy the four requirements for granting a stay, we grant the petitioners' motion to stay the FCC's pricing rules and the "pick and choose" rule contained in its First Report and Order pending a final decision on the merits. Upon the filing of this order, the stay imposed by our order of September

Date

PROCEEDINGS

27, 1996, is dissolved, and is replaced by the stay imposed by the terms of this order. (See order filed October 15, 1996).

11/1/96

JUDGE ORDER: The stay entered herein on October 15, 1996, is modified by lifting the stay only as to Sec. 51.701, Sec. 51.703, and Sec. 51.717, First Report and Order. To the extent requests were made in the filed resonses to lift the stay as to other of the final Rules, those requests were deemed to be motions seeking such relief and are denied.

1/17/97

ARGUED AND SUBMITTED IN ST. LOUIS TO JUDGES Pasco M. Bowman, Circuit Judge, Roger L. Wollman, Circuit Judge, David R. Hansen, Circuit Judge. William P. Barr for Large LECS (Bell Atlantic Corp., Bellsouth Corp., Pacific Telesis, SBC Communications, US West, GTE, Ameritech, NYNEX on Appeal in 96-3321+, Maureen E. Mahoney for Small LECS (USTA, Rural Telephone) on Appeal in 96-3321, Mark R. Kravitz for Mid-Size LECS (North State Telephone, Concord Telephone, Rock Hill Telephone, Roseville Telephone, SNET, Cincinnati Bell, Pacific Telecom, ALLTEL Telephone Services, Aliant Communications Co., New York Telephone, New England Telephone) on Appeal in 96-3321, Diane Carol Munns for Petitioner The State Commissioners (Iowa Utilities Board, MD Public Service, APSC, HUC, MPUC, KPSC, KCC, PSCW, AL Public Service, NMSCC, MPSC, PSC, PCC, CUC. COPUC, People of the State of New York, Public Service, New York; LA Public Service; SD Public Service; NC Utilities; CA Public Utilities; MS Public Service; MO Public Service; PS Public Utility) in 96-3321. Christoper J. Wright for Respondents FCC in 96-3321, Bruce J. Ennis and David Carpenter for Intervenors (Aging Forum, U.S. Coalition on Aging, College for Living, Coun-

PROCEEDINGS

cil for Silver Haired Legislatures, Missouri Alliance of Area Agencies on Aging, Missouri Association for the Deaf, Missouri Council for the Blind, President's Club for Telecommunications Justice, Paraquad, Rural Advocates for Independent Living, Services for Independent Living, Ad Hoc Coalition of Telecommunications Manufacturing Companies, American Electric Power Service Corp., Commonwealth Edison, Northern States Power Co., Pennsylvania Power Co., AT&T Corp., MCI, ACC, ACTA, Comcast, Cable & Wireless, Allied Communications, CTA, Excel, GST, Cox, GCI, ICG, KMC, MFS, National Cable Television, Nextlink, Sprint Corp., CTRA, Teleport, Vanguard Cellular, US One, Western Wireless, Winstar, Worldcom, Western Alliance, Texas Office of Public Utility Counsel, Competition Policy, RTG, Pro-Net, PageNet, SCBA) on Appeal in 96-3321, Glenn B. Manishin for CFA (Intervenor Consumer Federation of America) and Irwin Popowsky for NASUCA (Intervenor National Association of State Utility Consumer Advocates) on Appeal 96-3321, Robert A. Long for Intervenors (CMRS Providers) on Appeal in 96-3321. Rebuttal by: Barr and Munns. RECORDED.

- 7/18/97 THE COURT: Pasco M. Bowman, Roger L. Wollman, David R. Hansen. OPINION FILED by David R. Hansen PUBLISHED.
- 7/18/97 JUDGMENT: Pasco M. Bowman, Roger L. Wollman, David R. Hansen: The order of the FCC is AFFIRMED, and VACATED in accordance with the opinion.
- 10/14/97 JUDGE ORDER: 1. The petitions for rehearing filed by AT & T, MCI, America's Carriers Telecommunications Assoc, Cable & Wireless World-Com, Competitive Telecommunications Assoc, Sprint, Telecommunications Resellers Assoc, Fron-

PROCEEDINGS

tier. Competition Policy Institute, Assoc, for Local Telecommunication Services, Winstar Communications, Nextlink Communications, LLC, Time Warner, US One Communications, ICG Telecom Group, ACSI, and the Natl. Cable Television Assoc, are denied. The petitions for rehearing filed by GTE Entities, SBC Communications, Inc. BellSouth Corporation, US WEST, Bell Atlantic Corp, the Mid-Sized LEC's and Ameritech are granted. 2. Upon rehearing the Court' strikes Part II(G)(1)(f) of the opinion issued July 18, 1997. reported at 120 F.3d 753,813 (8th Cir. 1997), and substitutes the following (SEE ORDER FOR DE-TAILS) 3. Footnote 38 and 39 of the opinion filed July 18, 1997, are amended as follows: The citations to rule 51.315(c)-(f) are amended to read "51.315(b)-(f)."

1/15/98

ARGUED in ST. LOUIS on Petitioners' motion to enforce to Judges Pasco M. Bowman, Roger L. Wollman, David R. Hansen. Diane Carol Munns for Petitioner IUB in 96-3321, et al.; Mark Evans for Petitioners Bell South, et al. in 96-3321; M. Edward Whelan for Petitioners/Intervenors on Appeal GTE in 96-3321, et al.; Christopher J. Wright for Respondents FCC in 96-3321, et al., David W. Carpenter for Intervenors FCC in 96-3321, et al.; Rebuttal by Ms. Diane Munns and Mr. Mark Evans. RECORDED.

1/22/98

JUDGE ORDER: Writ of Mandamus. In accordance with the order of the United States Court of Appeals for the Eighth Circuit herein delivered, the FCC is hereby ordered to obey the Court's October 14, 1997, mandate in Appeal No. 96-3321, Iowa Utilities Board v. FCC. The FCC is ordered to apply section 252(d) of the Telecommunications Act of 1996 in the context of section 271 as the court's decision in Iowa Util. Bd. v. FCC, 120 F.3d

Date

PROCEEDINGS

753 (8th Cir. 1997) requires. It is further ordered that the FCC cease and desist from attempting to give effect to its interpretation of the substantive requirements of section 252(d) of the Act. The FCC is ordered to confine its pricing role under section 271(d)(3)(A) to determining whether applicant BOCs have complied with the pricing methodology and rules adopted by the state commissions and in effect in the respective states in which such BOCs seek to provide in-region, inter-LATA services. It is so ordered.

1/22/98

THE COURT: Pasco M. Bowman, Roger L. Wollman, David R. Hansen. OPINION FILED by David R. Hansen PUBLISHED.

Before the FEDERAL COMMUNICATION COMMISSION Washington, D.C. 20554

CC Docket No. 96-98 IN THE MATTER OF

IMPLEMENTATION OF THE LOCAL COMPETITION
PROVISIONS IN THE
TELECOMMUNICATIONS ACT OF 1996

NOTICE OF PROPOSED RULEMAKING

Adopted: April 19, 1996 Released: April 19, 1996

Comment Date: May 16, 1996 Reply Date: May 30, 1996

Separate Dates for Dialing Parity/Number Administration/ Notice of Technical Changes/Access to Rights of Way:

Comment Date: May 20, 1996 Reply Date: June 3, 1996

By the Commission:

A. Background

4. In contrast to the 1996 Act, the common carrier provisions of the Communications Act of 1934 were grounded in the notion that interstate telecommunications services would be offered and regulated on a monopoly basis. For decades, state legislatures also followed this traditional approach in regulating LECs' intrastate services. Local and long distance telephone monopolies were created and maintained on the grounds that the provision of telecommunications services was a natural monopoly ⁸

⁸ A market is characterized as a natural monopoly if a single firm can serve the market at a lower cost than two or more firms. This

and, consequently, service could be provided at the lowest cost to the maximum number of consumers through a single regulated telecommunications network. The monopoly paradigm was thought to further goals of universal service, service quality, and reliability. The Modification of Final Judgment (MFJ) that required AT&T to divest the Bell Operating Companies (BOCs) in 1984 was not so much a repudiation as a reduction in the scope of this paradigm. It reflected the judgment that the markets for interexchange services, telecommunications equipment, and information services could become competitive. At the same time, the local exchange continued to be treated as a natural monopoly that required rigorous regulatory oversight by state and federal authorities.

* * * *

6. We believe that, in enacting the 1996 Act, Congress recognized that although removing legal barriers to entry is necessary, it is still not sufficient to enable competition to replace monopoly in the local exchange. Congress acknowledged that incumbent LECs have constructed and put in place high quality, reliable, redundant local networks that can provide virtually ubiquitous service, and that they possess an approximate 99.7 percent share of the local market as measured by revenues. Because of this

result is due to one provider being able to exploit economies of scale throughout the range of output likely to be demanded by the market. See, e.g., Alfred Kahn The Economics of Regulation Vol. II 119 (1988); see also Daniel Spulber Regulation and Markets 3 (1989).

⁹ United States v. AT&T, 552 F. Supp. 131 (D.D.C. 1982), aff'd sub nom. Maryland v. United States, 460 U.S. 1001 (1983), vacated sub nom. United States v. Western Elect. Co., slip op. CA 82-0192 (D.D.C. Apr. 11, 1996).

¹³ Telecommunications Industry Revenue: TRS Fund Workshop Data, FCC Industry Analysis Division, Feb. 1996, Tables 14 and 15 show that LEC revenues in 1994 were \$98.4 billion, while total Competitive Access Provider revenue was \$287 million. Even though competitive access provider (CAP) revenues have grown to approximately \$1.15 billion in 1995, they still represent a de minimis por-

existing infrastructure, an incumbent LEC typically can serve a new customer at a much lower incremental cost than could a new entrant that is denied access to the incumbent LEC's facilities, and thereby is denied access to as many central office switches and as much trunking and subscriber loops as the incumbent LEC operates. Moreover, because virtually all existing customers subscribe to the incumbent LEC, a consumer of local switched service would not subscribe to a new entrant's network if the customer could not complete calls to the incumbent LEC's end users. As Congress appeared to recognize in enacting section 251, if the incumbent LEC has no obligation to interconnect and to arrange for mutual transport and termination of calls, it could effectively block or greatly retard entry into switched local service by using its economies of scale and network externalities as impediments to entry.

7. Congress expressly recognized that "it is unlikely that competitors will have a fully redundant network in place when they initially offer local service, because the investment necessary is so significant." ¹⁴ AT&T, for example, in filings before the Commission, has estimated that it would have to invest approximately \$29 billion to construct new facilities in local markets in order to be able to provide full facilities to reach 20 percent of the 117 million access lines served by the BOCs. ¹⁵ Similarly,

tion of the market. Local Telecommunications Competition Annual 1995-96. Connecticut Research, Glastonbury, Conn. (1995) at i-5. Table 1.3.

¹⁴ Joint Explanatory Statement at 148.

¹⁵ AT&T submission, Mar. 18, 1996. By contrast, AT&T's capital construction cost for 1995 was \$4.96 billion. See Merrill Lynch, Telecom Services-Long Distance, Fourth Quarter Review: How Much Longer Can the Equilibrium Last? The Catalyst: The Telecommunications Act of 1996, Feb. 15, 1996 at Table 6. Since January 1994, MCI Metro has spent \$500 million to deploy a total of 2.338 route miles of fiber and 11 switches in 25 cities across the country.

cable ¹⁶ and wireless ¹⁷ systems will require substantial investment before either is capable of providing a widespread substitute for wireline telephony services.

* * * *

16 Cable systems pass 96 percent of homes in the United States. See Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, Second Annual Report. 11 FCC Rcd 2060 (1995) (based on a total of 91.6 million television households as of year-end 1994). The provision of telephony over cable systems, however, is largely in the experimental stages today. For example, Motorola recently announced that it will provide cabletelephony products to TCI Telephony Services, enabling TCI to begin cable-based telephony services in the Chicago area this year. Motorola Multimedia Announces Purchase Agreement with TCI. Press Release (September 21, 1995). As of October 1995, Time Warner was providing telephony to approximately 50 homes in the Rochester area. The Big Boys Come Calling, N.Y. Times, Oct. 19, 1995, at 1. Some other cable operators have announced plans to deploy cable-telephony systems by the end of 1996. See Paul Farhi, Alexandria Cable Firm to Offer Phone Service: Company Would Compete With Bell, Wash. Post, Feb. 17, 1996, at B1. Virtually all cable systems, however, will require significant network upgrades in order to provide telephony service, including additional deployment of fiber optic cable, additional electronics, and backup power systems.

17 Although wireless technologies are continuing to develop, some wireless carriers, particularly in urban areas, currently face serious capacity constraints. These will be alleviated through the conversion from analog to digital service, further advances in compression technology, and the deployment of personal communications service (PCS). Huge investments to reduce cell size and increase frequency reuse may be required to give wireless systems a significant fraction of the traffic-carrying capacity of the incumbent LECs' networks. There is also currently a significant price difference between wireless and wireline service. A wireless call, for example, is typically priced at several times the price of a wireline call. Sprint Spectrum offers an introductory price for its wireless service of \$15 per month, which includes access to the system, 15 minutes of air time, and \$.31 per minute thereafter. See A Beginner's Guide to the Cellular Maze, Wash. Post. Dec. 4, 1995. In contrast, the average price paid by residential customers for local wireline service is about \$.03 per minute. See Trends in Telephone Service. FCC Industry Analysis Division, Feb. 1995. Tabels 6 and 19.

(2) Access to Network Elements

86. Section 251(c)(3) requires incumbent LECs to provide "access" to network elements "on an unbundled basis." ¹¹⁵ We interpret these terms as requiring incumbent LECs for a fee to provide requesting carriers with the ability to obtain a particular element's functionality, such as a local loop's function of transmitting signals from a LEC central office to a customer premises, separate from that of other functionalities or network elements, such as the local switch. Further, the term "unbundled" suggests that there must be a separate charge for each purchased network element. ¹¹⁶ We seek comment on this and any alternative interpretations of section 251(c)(3).

261. We seek comment on whether the Commission can and should establish some standards that would assist

the states in satisfying their obligations under this section. For example, should the Commission establish standards regarding what would constitute a "bona fide" request? We tentatively conclude that the states alone have authority to make determinations under section 271(f).

* * * *

265. Section 252(e)(5) directs the Commission to assume responsibility for any proceeding or matter in which the state commission "fails to act to carry out its responsibility" under that section.³⁷⁴ We note that, unlike section 251(d)(1), there is no specified time within which the

^{115 1996} Act, sec. 101, § 251(c)(3).

^{116 &}quot;Access" is defined as the "ability or permission to approach, enter. . . . or use." Random House College Dictionary 9 (revised ed. 1980). "Unbundle" is defined as "to separate (the charges for related products and services usually offered in a single transaction at one all-inclusive price)." Id. at 1428.

^{374 1996} Act, sec. 101, § 252(e)(5). Before doing so, section 252(e)(5) requires the Commission to issue an order preempting the state's jurisdiction of that proceeding or matter.

Commission must establish regulations pursuant to section 252(e)(5). Thus, we seek comment on whether in this proceeding we should establish regulations necessary and appropriate to carry out our obligations under section 252(e)(5). We also seek comment on what constitutes notice of failure to act, and what procedures, if any, we should establish for interested parties to notify the FCC that a state commission has failed to act.

* * * *

BEFORE THE FEDERAL COMMUNICATIONS COMMISSION WASHINGTON, DC 20554

CC Docket No. 96-98

IN THE MATTER OF
IMPLEMENTATION OF THE LOCAL COMPETITION
PROVISIONS IN THE TELECOMMUNICATIONS ACT OF 1996

CC Docket No. 95-185

Interconnection between Local Exchange Carriers and Commercial Mobile Radio Service Providers

FIRST REPORT AND ORDER

Adopted: August 1, 1996 Released: August 8, 1996

By the Commission: Chairman Hundt and Commissioners Quello, Ness, and Chong issuing separate statements.

14. We also note that many new entrants will not have fully constructed their local networks when they begin to offer service. Although they may provide some of their own facilities, these new entrants will be unable to reach all of their customers without depending on the incumbent's facilities. Hence, in addition to an arrangement for terminating traffic on the incumbent LEC's network, entrants will likely need agreements that enable them to obtain wholesale prices for services they wish to sell at retail and to use at least some portions of the incumbents'

⁹ Joint Managers' Statement, S. Conf. Rep. No. 104-230, 104th Cong., 2d Sess. 113 (1996) ("Joint Explanatory Statement") at 121.

facilities, such as local loops and end office switching facilities.

- that section 2(b) of the 1934 Act does not require a contrary conclusion. Section 2(b) states that, except as provided in certain enumerated sections not including sections 251 and 252, "nothing in [the 1934] Act shall be construed to apply or to give to the Commission jurisdiction with respect to . . . charges, classifications, practices, services, facilities, or regulations for or in connection with intrastate communication service by wire or radio of any carrier . . . "89 We noted in the NPRM that sections 251 and 252 do not alter the jurisdictional division of authority with respect to matters falling outside the scope of these provisions. For example, rates charged to end users for local exchange service have traditionally been subject to state authority, and will continue to be.
- 80. These parties also reject the claim that section 251 takes precedence over section 2(b).¹²⁴ They note that section 2(b) was not amended by the 1996 Act, although prior version of the bills would have done so.¹²⁵ Moreover, parties claim that, in other instances, Congress did specifically amend section 2(b) to give the Commission authority over intrastate aspects of specified matters.¹²⁶ Bell

⁸⁸ NPRM at para. 39.

^{89 47} U.S.C. § 152(b).

⁹⁰ NPRM at para. 40.

¹²⁴ See, e.g., Bell Atlantic comments at 4; Connecticut Commission comments at 5; Oregon Commission comments at 12; Indiana Commission Staff comments at 4-5; Iowa Commission comments at 6.

¹²⁵ See, e.g., Maryland Commission comments at 16 (citing Conf. Rep. No. 104-230 at 78 and H.R. 1555 Rep. No. 104-204 at 53); accord NARUC comments at 10 (citing Russello v. U.S., 464 U.S. 16 (1989)); Oregon Commission comments at 15.

¹²⁶ California Commission comments at 11; Connecticut Commission comments at 7 (citing the Omnibus Budget Reconciliation Act

Atlantic asserts that the failure to amend section 2(b) is "fatal to the notice's proposed federalization of intrastate interconnection and other intrastate matters." ¹²⁷ The Ohio Commission expressly rejects the suggestion in the NPRM that there was no need to amend section 2(b) because sections 251 and 252 do not affect end user rates. ¹²⁸

. . . .

84. For the reasons set forth below, we hold that section 251 authorizes the FCC to establish regulations regarding both interstate and intrastate aspects of interconnection, services, and access to unbundled elements. We also hold that the regulations the Commission establishes pursuant to section 251 are binding upon states and carriers and section 2(b) does not limit the Commission's authority to establish regulations governing intrastate matters pursuant to section 251. Similarly, we find that the states' authority pursuant to section 252 also extends to both interstate and intrastate matters. Although we recognize that these sections do not contain an explicit grant of intrastate authority to the Commission or of interstate authority to the states, we nonetheless find that this interpretation is the only reasonable way to reconcile the various provisions of sections 251 and 252, and the statute as a whole. As we indicated in the NPRM, it would make little sense in terms of economics or technology to distinguish between interstate and intrastate components for purposes of sections 251 and 252,139

of 1993 as an example of congressional intent to alter jurisdictional authority); Maryland Commission comments at 20; Ohio Commission comments at 14-15; BellSouth reply at 4.

¹²⁷ Bell Atlantic comments at 7.

¹²⁸ Ohio Commission comments at 15 (the 1993 amendments to sections 2(b) expressly reserved to states responsibility for wholesale rates in general).

¹³⁹ We believe that this interpretation is the most reasonable one in light of our expectation that marketing and product offerings by

- 94. Some parties find significance in the fact that earlier drafts of the legislation would have amended section 2(b) to make an exception for Part II of Title II, including section 251, but the enacted version did not include that exception. These parties argue that this change in drafting demonstrates an intention by Congress that the limitations of section 2(b) remain fully in force with regard to sections 251 and 252. We find this argument unpersuasive.
- 95. Parties that attach significance to the omission of the proposed amendment of section 2(b) rely on a rule of statutory construction providing that, when a provision in a prior draft is altered in the final legislation, Congress intended a change from the prior version. This rule of statutory construction has been rejected, however, when changes from one draft to another are not explained. 155 In this instance, the only statement from Congress regarding the meaning of the omission of the section 2(b) amendment appears in the Joint Explanatory Statement of the Conference Report. According to the Joint Explanatory Statement, all differences between the Senate Bill, the House Amendment, and the substitute reached in conference are noted therein "except for clerical corrections, conforming changes made necessary by agreements reached by the conferees, and minor drafting and clerical changes." 156 Because the Joint Explanatory Statement did not address the removal of the section 2(b) amendment from the final bill, the logical inference is that Congress regarded the change as an inconsequential modification rather than a significant alteration. Moreover, it seems implausible that, by selecting the final version, Congress

telecommunications carriers will diminish or eliminate the significance of interstate-intrastate distinctions.

¹⁵⁵ Mead Corp v. Tilley, 490 U.S. 714, 723 (1989); Rastelli v. Warden, 782 F.2d 17, 23 (2d Cir. 1986); Drummond Coal v. Watt, 735 F.2d 469, 474 (11th Cir. 1984).

¹⁵⁶ Joint Explanatory Statement at 113.

intended a radical alteration of the Commission's authority under section 251, given the total lack of legislative history to that effect. We conclude that elimination of the proposed amendment of section 2(b) was a nonsubstantive change because, as AT&T contends, such amendment was unnecessary in light of the grants of authority under sections 251 and 252, and would have had no practical effect.157

104. In the NPRM, we sought comment on our tenta-

tive conclusion that sections 251(c)(2), (c)(3), and (c)(6) establish the Commission's legal authority under section 251(d) to adopt pricing rules to ensure that the rates, terms, and conditions for interconnection, access to unbundled network elements, and collocation are just, reasonable, and nondiscriminatory. 175 We also sought comment on our tentative conclusion that sections 251 (b)(5) and 251(c)(4) establish our authority to define "wholesale rates" for purposes of resale, and "reciprocal compensation arrangements" for purposes of transport and termination of telecommunications services. 176 In addition, we asked parties to comment on our tentative conclusion that the Commission's statutory duty to implement the pricing requirements of section 251, as elaborated in section 252, requires that we establish pricing rules interpreting and further explaining the provisions of section 252(d). The states would then apply these rules in establishing rates pursuant to arbitrations and in reviewing BOC statements of generally available terms and conditions. 177

105. We further sought comment on our tentative conclusion that national pricing rules would likely reduce or

¹⁵⁷ AT&T reply at 4 n.5.

¹⁷⁵ NPRM at para. 117.

¹⁷⁶ Id. at 118.

¹⁷⁷ Id. at para, 118.

eliminate inconsistent state regulatory requirements, increase the predictability of rates, and facilitate negotiation, arbitration, and review of agreements between incumbent LECs and competitive providers. ¹⁷⁸ We also sought comment on the potential consequences of the Commission not establishing specific pricing rules. ¹⁷⁹

. . . .

- 126. We further conclude that section 252(e)(6) does not divest the Commission of jurisdiction, in whole or in part, over complaints that a common carrier violated section 251 or 252 of the Act. Section 601(c)(1) of the 1996 Act provides that the 1996 Act "shall not be construed to modify, impair or supersede" existing federal law—which includes the section 208 complaint process—"unless expressly so provided." ²³⁵ Sections 251 and 252 do not divest the Commission of its section 208 complaint authority.
- 127. An aggrieved party could file a section 208 complaint with the Commission, alleging that the incumbent LEC or requesting carrier has failed to comply with the requirements of sections 251 and 252, including Commission rules thereunder, even if the carrier is in compliance with an agreement approved by the state commission. Alternatively, a party could file a section 208 complaint alleging that a common carrier is violating the terms of a negotiated or arbitrated agreement. We plan to initiate a proceeding to adopt expedited procedures for resolving complaints filed pursuant to section 208.
- 128. We note that, in acting on a section 208 complaint, we would not be directly reviewing the state commission's decision, but rather, our review would be strictly limited to determining whether the common carrier's actions or omissions were in contravention of the Communi-

¹⁷⁸ Id. at para. 119.

¹⁷⁹ Id.

^{235 47} U.S.C. § 601(c)(1).

cations Act.²³⁶ Thus, consistent with our past decisions in analogous contexts,²³⁷ we conclude that a person aggrieved by a state determination under sections 251 and 252 of the Act may elect to either bring an action for federal district court review or a section 208 complaint to the Commission against a common carrier. Such a person could, as a further alternative, pursuant to section 207, file a complaint against a common carrier with the Commission or in federal district court for the recovery of damages.²³⁸ We are unlikely, in adjudicating a complaint, to examine the consistency of a state decision with sections 251 and 252 if a judicial determination has already been made on the issues before us.²⁸⁹

156. We also find that incumbent LECs may not require requesting carriers to satisfy a "bona fide request" process as part of their duty to negotiate in good faith. Some of the information that incumbent LECs propose to include in a bona fide request requirement may be legiti-

²³⁶ While we would have authority to review such complaints, we note that we might decline, at least in some instances, to impose financial penalties upon a common carrier that is acting pursuant to state requirements or authorization, even if we sustain the allegations in the complaint.

FCC Rcd 4032, 4033 (1994) (provision permitting persons aggrieved by violation of prohibition against unauthorized publication of certain communications to "bring a civil action in United States district court or any other court of competent jurisdiction" did not bar a complaint under section 208 of the Communications Act); see also Policies Governing the Provision of Shared Telecommunications Service, 3 FCC Rcd 6931 (1988) (the section 208 complaint process is available to resolve any specific problems that might arise regarding shared telecommunications service regulation by a state that impinges upon a federal interest).

²³⁸ See 47 U.S.C. § 207.

²³⁹ Town of Deerfield v. FCC, 992 F.2d 420, 428-430 (2d Cir. 1993).

mately demanded from the requesting carrier; some of the proposed requirements, on the other hand, exceed the scope of what is necessary for the parties to reach agreement, and imposing such requirements may discourage new entry. For example, parties advocate that a "bona fide request" requirement should require requesting carriers to commit to purchase services or facilities for a specified period of time. We believe that forcing carriers to make such a commitment before critical terms, such as price, have been resolved is likely to impede new entry. Moreover, we note that section 251(c) does not impose any bona fide request requirement. In contrast, section 251(f)(1) provides that a rural telephone company is exempt from the requirements of 251(c) until, among other things, it receives a "bona fide request" for interconnection, services, or network elements. This suggests that, if Congress had intended to impose a "bona fide request" requirement on requesting carriers as part of their duty to negotiate in good faith. Congress would have made that requirement explicit.

- D. Applicability of Section 252 to Preexisting Agreements
 - 1. Background
- 157. Section 252(a)(1) provides that, "[u]pon receiving a request for interconnection, services, or network elements pursuant to section 251, an incumbent local exchange carrier may negotiate and enter into a binding agreement with the requesting telecommunications carrier or carriers without regard to the standards set forth in subsections (b) and (c) of section 251... The agreement, including any interconnection agreement negotiated before the date of enactment of the Telecommunications Act of 1996, shall be submitted to the State commission under subsection (e) of this section." ²⁹⁶

^{295 47} U.S.C. § 252(a)(1). Section 252(e) provides that "(a)ny interconnection agreement adopted by negotiation or arbitration

158. In the NPRM, we sought comment on whether sections 252(a)(1) and 252(e) require parties that have negotiated agreements for interconnection, services or network elements prior to the passage of the 1996 Act to submit such agreements to state commissions for approval. We also asked whether one party to such an existing agreement could compel renegotiation and arbitration in accordance with the procedures set forth in section 252.

2. Comments

159. In general, potential local competitors that addressed this issue argue that the plain language of section 251(a)(1) requires such agreements to be filed with the appropriate state commission for review under section 252(e). In addition, these parties assert that, pursuant to section 252(i), the terms of such agreements must be made available to other carriers. These parties claim that filing such agreements also should be required as a matter of public policy, because they provide evidence of existing interconnection terms that may provide the baseline for other negotiations, and ensure that incumbents are not favoring some carriers over others. Parties also

shall be submitted for approval to the State commission." 47 U.S.C. § 252(e).

²⁹⁸ See, e.g., ALTS comments at 14-16; CompTel comments at 104; GST comments at 7; Jones Intercable comments at 22-23; Ohio Consumers' Counsel comments at 6; Sprint comments at 12; TCC comments at 9-10; see also Louisiana Commission comments at 8 (carriers must submit preexisting agreements upon request by the state commission).

²⁹⁷ Section 252(i) provides that a LEC "shall make available any interconnection, service, or network element provided under an agreement approved under this section to which it is a party to any other requesting telecommunications carrier upon the same terms and conditions as those provided in the agreement." 47 U.S.C. § 252(i).

²⁰⁸ AT&T comments at 88-90; Jones Intercable comments at 22-23.

²⁹⁹ ALTS comments at 14-16, reply at 39-41.

claim that preexisting agreements will provide useful information to the states,³⁰⁰ and that states should have the ability to review preexisting agreements to ensure that they comply with the 1996 Act.³⁰¹

160. Incumbent LECs allege that the statute does not require that preexisting agreements be filed with state commissions. They contend that Congress only intended parties to file agreements negotiated pursuant to section 251.302 These parties point out that section 252(a) specifically refers to requests for interconnection, services, or network elements "pursuant to section 251," and contend that an agreement reached prior to the enactment of the 1996 Act, by definition, could not have been negotiated pursuant to section 251.363 Several parties suggest that the 1996 Act only requires filing of preexisting agreements that have been amended subsequent to the enactment of the 1996 Act, or that have been incorporated by reference into agreements negotiated pursuant to section 251.304 Some commenters also contend that, as a policy matter, there is no reason to require filing of preexisting agreements. The California Commission asserts that requiring filing and review of preexisting agreements would be burdensome for states, and is unnecessary, because many states already reviewed such agreements prior to the passage of the 1996 Act. 305

³⁰⁰ See, e.g., AT&T comments at 88-90.

³⁰¹ See, e.g., Arch comments at 9-10; Time Warner comments at 25.

so2 See, e.g., BellSouth comments at 10-11; Cincinnati Bell comments at 9-10; Home Tel. comments at 2; J. Staurulakis comments at 3; F. Williamson comments at 5.

³⁰³ See, e.g., Ameritech comments at 95-96; BellSouth comments at 10-11; NYNEX reply at 15-16 (section 251(i) also applies only to agreements approved under section 252).

⁸⁰⁴ See, e.g., Ameritech comments at 95-96; BellSouth comments at 10-11.

⁸⁰⁸ California Commission comments at 33.

- 161. A related question is whether there should be a distinction between preexisting interconnection agreements between competitors within the same service area and agreements between non-competing or neighboring LECs. Several parties contend that the 1996 Act does not exempt such agreements from the filing requirement. ** They also claim that it may be difficult to monitor whether parties are competing, and that, in light of the 1996 Act, parties that did not compete in the past may do so in the future. 307 ACTA asserts that such agreements will provide the best information available on technically, economically and operationally feasible interconnection arrangements, because these agreements were reached in a noncompetitive context, where the incumbent was not striving to protect its market from competition, and therefore, as a public policy matter, they should be publicly filed.308 ALTS states that Wisconsin and other states have already addressed this issue and reached the same conclusion. 309
- 162. Incumbent LECs argue that Congress did not contemplate that agreements between non-competing LECs would be used as models for agreements between competitors, ³¹⁰ and that such agreements bear no relation to

³⁰⁶ See, e.g., Colorado Commission comments at 50; MFS comments at 66; Michigan Commission Staff comments at 20; Ohio Consumers' Counsel comments at 34; Oregon Commission comments at 33; ALTS reply at 35; Cox reply at 38-39; WinStar reply at 18-19.

³⁰⁷ See, e.g., MFS comments at 67; Oregon Commission comments at 34; ALTS reply at 36; Cox reply at 39.

³⁰⁸ ACTA comments at 6-8; accord Cox reply at 38; WinStar reply at 19.

ALTS reply at 35-36. See, e.g., Investigation of the Implementation of the Federal Telecommunications Act of 1996 in Wisconsin, 05-TI-140 (Winconsin Commission May 17, 1996); In re Negotiated Interconnection Agreements of Telecommunications Carriers, Docket No. 96-098-U (Arkansas Commission rel. Apr. 1, 1996).

³¹⁰ See, e.g., NYNEX comments at 27 (citing Joint Explanatory Statement at 117, 120; Cong. Rec. S7893 (daily ed. June 7, 1995)

competitive interconnection agreements.³¹¹ Some parties argue that requiring preexisting agreements between non-competing LECs would jeopardize universal service in many areas, especially where extended area service arrangements are in place.³¹² NYNEX and the Rural Telephone Coalition contend that agreements between neighboring LECs fall within the provisions of section 259, which give rural LECs that lack economies of scope or scale the right to obtain or continue "infrastructure sharing" with neighboring larger LECs.³¹³

163. Several parties recommend that agreements before enactment of the 1996 Act should be subject to a period of renegotiation.³¹⁴ For example, Sprint contends that the passage of the 1996 Act constitutes a "changed circumstance" that would justify renegotiation of preexisting agreements.³¹⁵ Sprint proposes that parties should be required to file preexisting agreements with the state commission, but that parties should be given a six-month period to renegotiate before the terms of such agreements

⁽statement of Sen. Pressler)); Rural Tel. Coalition comments at 16; SBC comments at 53; USTA comments at 68-69.

³¹¹ Cincinnati Bell comments at 9-10; MECA comments at 20-21; Texas Statewide Telephone Cooperative, Inc. reply at 8-9; U S West reply at 29-30.

³¹² Home Tel. comments at 2; J. Staurulakis comments at 3; see also USTA comments at 69.

³¹⁸ NYNEX reply at 15; Rural Tel. Coalition reply at 12.

³¹⁴ Intermedia comments at 16; LCI comments at 24-26; Sprint comments at 12-13, reply at 13-14.

sis Sprint comments at 12 (pre-Act agreements were entered into under a different regulatory scheme, and without contemplation by the parties that the local market might become competitive; in addition, such contracts might be inconsistent with section 251, and states should not expend resources reviewing them); accord Time Warner comments at 26 (the Commission should establish "fresh look" period as it has done in other cases involving changed circumstances).

are made available to others under section 252(i). Intermedia Communications advocates that parties that signed long-term contracts with incumbent LECs before additional rights and competitive alternatives were available under the 1996 Act should be permitted to terminate those agreements, with minimal liability, for a period of six months after such competitive alternatives become available. GST advocates that only non-incumbent LECs that are parties to an agreement should have the right to renegotiate contracts. The Texas Commission states that parties should be permitted to renegotiate in the event that the state determines that the preexisting agreement violates section 252. 318

164. Some parties contend that there is no basis for renegotiating of preexisting contracts.319 The Illinois Commission maintains that parties have a legal obligation to abide by the terms of their contracts, and the 1996 Act does not affect that obligation. 320 It claims that a unilateral right to abrogate existing contracts could undo progress that has already been made to foster local competition. The Illinois Commerce Commission notes that parties may mutually agree to amend existing contracts, and that a party that already has an agreement with an incumbent may request a new agreement under section 252(i) if the interconnection, services, or access to unbundled elements it seeks are different from those encompassed in the existing agreement. Pacific Telesis asserts that requiring renegotiation and arbitration of existing agreements would waste resources and interfere with parties' settled expectations.821

³¹⁶ Intermedia comments at 16; accord LCI comments at 24-26.

³¹⁷ GST comments at 7.

³¹⁸ Texas Commission comments at 7-8.

⁸¹⁹ See, e.g., Illinois Commission comments at 23-24; Louisiana Commission comments at 8: F. Williamson comments at 5.

³²⁰ Illinois Commission comments at 23-24.

³²¹ PacTel comments at 21.

3. Discussion

- 165. We conclude that the 1996 Act requires all interconnection agreements, "including any interconnection agreement negotiated before the date of enactment of the Telecommunications Act of 1996," to be submitted to the state commission for approval pursuant to section 252(e).322 The 1996 Act does not exempt certain categories of agreements from this requirement. When Congress sought to exclude preexisting contracts from provisions of the new law, it did so expressly. For example, section 276(b)(3) provides that "nothing in this section shall affect any existing contracts between location providers and payphone service providers or interLATA or intraLATA carriers that are in force and effect as of the date of enactment of the Telecommunications Act of 1996." 323 Nothing in the legislative history leads us to a contrary conclusion. Congress intended, in enacting sections 251 and 252, to create opportunities for local telephone competition. We believe that this pro-competitive goal is best effected by subjecting all agreements to state commission review
- 166. The first sentence in section 252(a)(1) refers to requests for interconnection "pursuant to section 251." The final sentence in section 252(a)(1) requires submission to the state commission of all negotiated agreements, including those negotiated before the enactment of the 1996 Act. Some parties have asserted that there is a tension between those two sentences. We conclude that the final sentence of section 252(a)(1), which requires that any interconnection agreement must be submitted to the state commission, can and should be read to be independ-

^{822 47} U.S.C. § 252(a).

^{323 47} U.S.C. § 276(b)(3) (addressing nondiscrimination safeguards and regulations regarding payphone service).

^{324 47} U.S.C. § 252(a)(1).

ent of the prior sentences in section 252(a)(1). The interpretation suggested by some commenters that preexisting contracts need only be filed if they are amended subsequent to the 1996 Act, or incorporated by reference into agreements negotiated pursuant to the 1996 Act, would force us to impose conditions that were not intended by Congress.

167. As a matter of policy, moreover, we believe that requiring filing of all interconnection agreements best promotes Congress's stated goals of opening up local markets to competition, and permitting interconnection on just, reasonable, and nondiscriminatory terms. State commissions should have the opportunity to review all agreements, including those that were negotiated before the new law was enacted, to ensure that such agreements do not discriminate against third parties, and are not contrary to the public interest. In particular, preexisting agreements may include provisions that violate or are inconsistent with the pro-competitive goals of the 1996 Act, and states may elect to reject such agreements under section 252(e)(2)(A). Requiring all contracts to be filed also limits an incumbent LEC's ability to discriminate among carriers, for at least two reasons. First, requiring public filing of agreements enables carriers to have information about rates, terms, and conditions that an incumbent LEC makes available to others. Second, any interconnection, service or network element provided under an agreement approved by the state commission under section 252 must be made available to any other requesting telecommunications carrier upon the same terms and conditions, in accordance with section 252(i).825 In addition, we believe that having the opportunity to review existing agreements may provide state commissions and potential competitors with a starting point for determining what is "technically feasible" for interconnection.

³²⁵ See infra, Section XV.B.

³²⁶ See, e.g., 47 U.S.C. §§ 251(c)(2)(B) and 251(c)(3).

- 168. Conversely, excluding certain agreements from public disclosure could have anticompetitive consequences. For example, such contracts could include agreements not to compete. In addition, if we exempt agreements between neighboring non-competing LECs, those parties might have a disincentive to compete with each other in the future. in order to preserve the terms of their preexisting agreements. Such a result runs counter to the goal of the 1996 Act to encourage local service competition. Moreover, preserving such "non-competing" agreements could effectively insulate those parties from competition by new entrants. For example, if a new entrant seeking to provide competitive local service in a rural community is unable to obtain from a neighboring BOC interconnection or transport and termination on terms that are as favorable as those the BOC offers to the incumbent LEC in the rural area, the new entrant cannot effectively compete. arr This is because the new entrant will have to charge its subscribers higher rates than the incumbent LEC charges to place calls to subscribers of the neighboring BOC.
- 169. We find that section 259 does not compel us to reach a different conclusion regarding the application of section 252 to agreements between neighboring LECs. ***

This analysis does not address the separate question of whether an incumbent LEC in a rural area must offer interconnection, resale services, or unbundled network elements. As discussed *infra*, Section XII, Congress provided rural carriers with an exemption from section 251(c) requirements until the state commission removes such exemption. 47 U.S.C. § 251(f)(1).

³²⁸ Section 259 requires the Commission to prescribe, within one year after the date of enactment of the 1996 Act, regulations that require incumbent LECs "to make available to any qualifying carrier such public switched network infrastructure, technology, information, and telecommunications facilities and functions as may be requested by such qualifying carrier to provide telecommunications services, or to provide access to information services . . ." 47 U.S.C. § 259(a). A "qualifying carrier" is a telecommunications carrier that "lacks economies of scale or scope," and that offers telephone exchange service, exchange access, and any other service included

Section 259 is limited to agreements for infrastructure sharing between incumbent LECs and telecommunications carriers that lack "economies of scale or scope," as determined in accordance with regulations prescribed by the Commission.329 We conclude that the purpose and scope of section 259 differ significantly from the purpose and scope of section 251.330 Section 259 is a limited and discrete provision designed to bring the benefits of advanced infrastructure to additional subscribers, in the context of the pro-competitive goals and provisions of the 1996 Act. Moreover, section 259(b)(7) requires LECs to file with the Commission or the state "any tariffs, contracts or other arrangements showing the rates, terms, and conditions under which such carrier is making available public switched network infrastructure and functions under this section." 381 We believe that this language further supports our conclusion that Congress intended agreements between neighboring LECs to be filed and available for public inspection. Commenters also have failed to persuade us that universal service is jeopardized by our finding that agreements between neighboring LECs are subject to section 252 filing and review provisions. Concerns regarding universal service should be addressed by the Federal-State Joint Board, empaneled pursuant to section 254 of the 1996 Act. 322 The Joint Board has initiated a comprehensive review of universal service issues and is considering, among other matters, access to telecommunications and information services in rural and high cost areas. 338 In addition, as discussed in Section XII, infra, the 1996 Act

in universal service to all consumers in the service area without preference. 47 U.S.C. § 259(d).

^{329 47} U.S.C. § 259(d)(1).

³³⁰ The Commission plans to initiate a proceeding to establish regulations pursuant to section 259.

^{881 47} U.S.C. § 259(b)(7).

³³² Universal Service NPRM, supra.

³⁸³ See 47 U.S.C. § 251(f).

provides for exemptions, suspension, or modification of some of the requirements in section 251 for rural or smaller carriers.

170. Some parties have suggested that we provide parties an opportunity to renegotiate preexisting contracts. Parties, of course, may mutually agree to renegotiate agreements, but we decline to mandate that parties renegotiate existing contracts. In addition, as discussed below, commercial mobile radio service (CMRS) providers that are party to preexisting agreements with incumbent LECs that provide for non-mutual compensation have the option of renegotiating such agreements with no termination liabilities or contract penalties.334 We believe that generally requiring renegotiation of preexisting contracts is unnecessary, however, because state commissions will review preexisting agreements, and may reject any negotiated agreement that "discriminates against a telecommunications carrier not a party to the agreement," or that "is not consistent with the public interest, convenience, and necessity." as We recognize that preexisting agreements were negotiated under very different circumstances, and may not provide a reasonable basis for interconnection agreements under the 1996 Act. For example, non-competing neighboring LECs may have negotiated terms that simply are not viable in a competitive market. It would not foster efficient long-term competition to force parties to make available to all requesting carriers interconnection on terms not sustainable in a competitive environment. In such circumstances, a state commission would have authority to reject a preexisting agreement as inconsistent with the public interest. If a state commission approves a preexisting agreement, that agreement will be available to other parties in accordance with section 252(i). Contrary to NYNEX's assertion, once a state approves an agreement under section 252(e), that agreement is "approved under" section 252.

³³⁴ See infra, Section XI.A.

^{885 47} U.S.C. § 252(e)(2)(A).

171. We decline to require immediate filing of preexisting agreements. States should establish procedures and reasonable time frames for requiring filing of preexisting agreements in a timely manner. We leave these procedures largely in the hands of the states in order to ensure that we do not impair some states' ability to carry out their other duties under the 1996 Act, especially if a large number of such agreements must be filed and approved by the state commission. We believe, nevertheless, that we should set an outer time period to file with the appropriate state commission agreements that Class A carriers have with other Class A carriers that pre-date the 1996 Act. 500 We conclude that setting such a time limit will ensure that third parties are not prevented indefinitely from reviewing and taking advantage of the terms of preexisting agreements. We are concerned, however, about the burden that a national filing deadline might impose on small telephone companies that have preexisting agreements with Class A carriers or with other small carriers. ser We therefore limit the filing deadline requirement to preexisting agreements between Class A carriers. We encourage all carriers to file preexisting contracts with the appropriate state commission no later than June 30, 1997, but impose this as a requirement only with respect to agreements between Class A carriers. We find that requiring preexisting agreements between Class A carriers to be filed no later than June 30, 1997 is unlikely to burden state commissions unduly, and will give parties a reasonable opportunity to renegotiate agreements if they so choose, while at the same time, establishing this outer time limit ensures that third parties will have access to the terms of such agreements, under section 252(i), within a reasonable period. We expect to have completed proceedings on universal service and access charges by this filing

esse Class A companies are defined as companies "having annual revenues from regulated telecommunications operations of \$100,000-000 or more." 47 C.F.R. § 32.11(a)(1).

³³⁷ See Regulatory Flexibility Act, 5 U.S.C. §§ 601 et seq.

deadline. States may impose a shorter time period for filing preexisting agreements.

B. National Interconnection Rules

1. Background

177. In the NPRM, we tentatively concluded that national interconnection rules would facilitate swift entry by competitors in multiple states by eliminating the need to comply with a multiplicity of state variations in technical and procedural requirements. We sought comment on this tentative conclusion.

2. Comments

178. Parties raise many of the same arguments discussed above, in section II.A., regarding the advantages and disadvantages of explicit national rules for interconnection. IXCs, CAPs, cable operators, and others claim that national rules could prevent incumbent LECs from erecting artificial barriers to entry. facilitate comprehensive business and network planning, see equalize bargaining power, and expedite and simplify negotiations. Other parties, including several BOCs and state commissions, argue that national rules should only be established for core requirements and should allow for state variations.

⁹⁵⁰ NPRM at paras. 50-51.

³⁶¹ See MFS comments at 14; Teleport comments at 22; CompTel comments at 21; Ad Hoc Telecommunications Users Committee comments at 5; ACTA comments at 10; ACSI comments at 10; MCI reply at 24.

See ACTA comments at 10; Vanguard comments at 10; Omnipoint comments at 17-18; NTIA reply at 3.

See Teleport comments at 17; Kansas Commission comments at 5; AT&T reply at 9; MCI reply at 24; Time Warner reply at 6-7.

³⁶⁴ See Intermedia comments at 3; Teleport reply at 8.

³⁸⁵ See, e.g., Ameritech comments at 11; BellSouth comments at 13-14; Bell Atlantic reply at 6-7; GTE reply at 9; Lincoln Tel. com-

Some parties contend, for example, that the pace of technological change makes it impossible to create immutable and uniform interconnection rules. SBC and PacTel claim that industry standards already exist for interconnection and that national standards would preclude the deployment of new technologies. PacTel also claims that Commission rules requiring untested interconnection methodologies may slow competitive entry.

3. Discussion

179. As discussed more fully above, we conclude that national rules regarding interconnection pursuant to section 251(c)(2) are necessary to further Congress's goal of creating conditions that will facilitate the development of competition in the telephone exchange market. Uniform rules will permit all carriers, including small entities and small incumbent LECs, to plan regional or national networks using the same interconnection points in similar networks nationwide. Uniform rules will also guarantee consistent, minimum nondiscrimination safeguards and "equal in quality" standards in every state. Such rules will also avoid relitigating, in multiple states, the issue of whether interconnection at a particular point is technically feasible.

180. We believe, however, that inflexible or overly detailed national rules implementing section 251(c)(2) may inhibit the ability of the states or the parties to reach

ments at 3; California Commission comments at 16; Illinois Commission comments at 25; New York Commission comments at 33; Texas Commission comments at 8; TCA comments at 4; Texas Tel. Ass'n comments at 1; F. Williamson comments at 7.

³⁵⁶ See Ad Hoc Telecommunications User Committee comments at 2; Citizens Utilities comments at 6-7; Rural Tel. Coalition comments at 31; Pennsylvania Commission reply at 23.

³⁸⁷ SBC comments at 33; PacTel comments at 24, 28.

³⁵⁸ PacTel comments at 23-24.

³⁵⁰ See Supra, Section II.A.

arrangements that reflect technological and market advances and regional differences. We also believe that, on several issues, the record is not adequate at this time to justify the establishment of national rules. Therefore, as required by section 251(d)(3) and as discussed in section II.C. above, our rules will permit states to go beyond the national rules discussed below, and impose additional procompetitive interconnection requirements, as long as such requirements are otherwise consistent with the 1996 Act and the Commission's regulations. We believe that we can benefit from state experience in our ongoing review of these issues.

3. Discussion

198. We conclude that the term "technically feasible" refers solely to technical or operational concerns, rather than economic, space, or site considerations. We further conclude that the obligations imposed by sections 251 (c)(2) and 251(c)(3) include modifications to incumbent LEC facilities to the extent necessary to accommodate interconnection or access to network elements. Specific, significant, and demonstrable network reliability concerns associated with providing interconnection or access at a particular point, however, will be regarded as relevant evidence that interconnection or access at that point is technically infeasible. We also conclude that preexisting interconnection or access at a particular evidences the technical feasibility of interconnection or access at substantially similar points. Finally, we conclude that incumbent LECs must prove to the appropriate state commission that a particular interconnection or access point is not technically feasible.

202. Several parties also attempt to draw a distinction between what is "feasible" under the terms of the statute, and what is "possible." The words "feasible" and "possible," however, are used synonymously. Feasible is defined

as "capable of being accomplished or brought about; possible." 435 The statute itself provides a more meaningful distinction. Unlike the "technically feasible" terminology included in sections 251(c)(2) and 251(c)(3), section 251(c)(6) uses the term "practical for technical reasons" in determining the scope of an incumbent LEC's obligation to provide for physical collocation. 436 "Practical" is defined as "manifested in practice or action . . . not theoretical or ideal" 437 or "adapted or designed for actual use; useful," and connotes similarity to ordinary usage. 438 Thus, it is reasonable to interpret Congress's use of the term "feasible" in sections 251(c)(2) and 251(c)(3) as encompassing more than what is merely "practical" or similar to what is ordinarily done. That is, use of the term "feasible" implies that interconnecting or providing access to a LEC network element may be feasible at a particular point even if such interconnection or access requires a novel use of, or some modification to, incumbent LEC equipment. This interpretation is consistent with the fact that incumbent LEC networks were not designed to accommodate third-party interconnection or use of network elements at all or even most points within the network. If incumbent LECs were not required, at least to some extent, to adapt their facilities to interconnection or use by other carriers, the purposes of section 251(c)(2) and 251(c)(3) would often be frustrated. For example, Congress intended to obligate the incumbent to accommodate the new entrant's network architecture by requiring the incumbent to provide interconnection "for the facilities and equipment" of the new entrant. Consistent with that intent, the incumbent must accept the novel use of, and

⁴³⁵ The American Heritage College Dictionary 499 (1993). Webster's Ninth New Collegiate Dictionary 453 (1989). Both "feasible" and "possible" refer to that which is "capable of being realized" *Id.* at 918.

^{436 47} U.S.C. § 251(c)(6) (emphasis added).

⁴³⁷ Webster's at 923.

⁴³⁸ Random House College Dictionary 1040 (rev. ed. 1984).

modification to, its network facilities to accommodate the interconnector or to provide access to unbundled elements.

- 203. We also conclude, however, that legitimate threats to network reliability and security must be considered in evaluating the technical feasibility of interconnection or access to incumbent LEC networks. Negative network reliability effects are necessarily contrary to a finding of technical feasibility. Each carrier must be able to retain responsibility for the management, control, and performance of its own network. Thus, with regard to network reliability and security, to justify a refusal to provide interconnection or access at a point requested by another carrier, incumbent LECs must prove to the state commission, with clear and convincing evidence, that specific and significant adverse impacts would result from the requested interconnection or access. The reports of the Commission's Network Reliability Council discuss network reliability considerations, and establish templates that list activities that need to occur when service providers connect their networks pursuant to defined interconnection specifications or when they are attempting to define a new network interface specification. 439
- 204. We further conclude that successful interconnection or access to an unbundled element at a particular point in a network, using particular facilities, is substantial evidence that interconnection or access is technically feasible at that point, or at substantially similar points in networks employing substantially similar facilities. In comparing networks for this purpose, the substantial similarity of network facilities may be evidenced, for example, by their adherence to the same interface or protocol standards. We also conclude that previous successful interconnection at a particular point in a network at a particular level of quality constitutes substantial evidence that inter-

⁴⁸⁹ Network Reliability: A Report to the Nation (1993, National Engineering Consortium); Network Reliability: The Path Forward (1996, Internet: http://www.fcc.gov/oet/nrc).

connection is technically feasible at that point, or at substantially similar points, at that level of quality. Although most parties agree with this conclusion, some LECs contend that such comparisons are all but impossible because of alleged variability in network technologies, even where the ultimate services offered by separate networks are the same. We believe that, if the facilities are substantially similar, the LECs' contention is adequately addressed.

* * * *

definition of a "network element" draws a distinction between a "facility or equipment used in the provision of a telecommunications service," and the "service" itself. We asked for comment on the meaning of this distinction in general, with respect to requirements for unbundling, and in connection with specific unbundled elements. We noted that the definition of a network element, i.e., a facility, function, or capability, is not dependent on the particular types of services that are provided by means of the element (e.g., interstate access, intrastate local exchange), and asked whether a carrier purchasing access to an element is obligated, pursuant to the definition, to provide all services typically carried or provided by that element. Sa4

2. Comments

252. A number of parties, including potential local competitors and state commissions, support the adoption of a flexible method for identifying network elements. They argue that a flexible method is necessary to accomodate future changes in technology. SASS NYNEX, the Texas

⁶³³ NPRM at para. 51, (citing 47 U.S.C. § 153(29)).

⁵⁸⁴ NPRM at para. 84.

omments at 36; Cable & Wireless comments at 17-19; Ericsson comments at 3; Alabama Commission comments at 19; ACSI com-

Public Utility Counsel, and GVNW contend that, to accommodate such changes, we should not define elements in rigid terms, or by specific technologies, but rather by general function.⁵³⁶

3. Discussion

- 258. We adopt the concept of unbundled elements as physical facilities of the network, together with the features, functions, and capabilities associated with those facilities. Carriers requesting access to unbundled elements within the incumbent LEC's network seek in effect to purchase the right to obtain exclusive access to an entire element, or some feature, function or capability of that element. For some elements, especially the loop, the requesting carrier will purchase exclusive access to the element for a specific period, such as on a monthly basis. Carriers seeking other elements, especially shared facilities such as common transport, are essentially purchasing access to a functionality of the incumbent's facilities on a minute-by-minute basis. This concept of network elements, as discussed infra at section V.G., does not alter the incumbent LEC's physical control or ability or duty to repair and maintain network elements.
- 259. We conclude that we should identify a particular facility or capability for example, as a single network element, but allow ourselves and the states (where appropriate) the discretion to further identify, within that single facility or capability, additional required network

ments at 30; Ohio Commission comments at 33; Florida Commission comments at 18; Hyperion comments at 18; GST comments at 16; LDDS comments at 29; Ohio Consumers' Counsel comments at 18; Nextel comments at 8; Time Warner comments at 44-45 (the Commission should identify elements in a way that gives parties maximum flexibility); but see Ad Hoc Telecommunications Users Committee comments at 15-16 (define elements narrowly to give maximum flexibility to offer innovative services).

⁵³⁶ NYNEX comments at 61-64; GVNW comments at 17-18; Texas Public Utility Counse comments at 8-9.

elements. Thus, for example, in this proceeding, we identify the local loop as a single network element. We also ask the states to evaluate, on a case-by-case basis, whether to require access to subloop elements, which can be facilities or capabilities within the local loop. 554 We agree with those commenters that argue that identifying a particular facility or capability as single network element, but allowing such elements to be further subdivided into additional elements, will allow our rules (as well as the states) to accommodate changes in technology, and thus better serve the interests of new entrants and incumbent LECs, and the procompetitive purposes of the 1996 Act. 655 We are not persuaded by PacTel's argument that it is unnecessary for our rules to permit the identification of additional elements, beyond those specifically referenced in parts of the 1996 Act, because our rules must conform to the definition of a network element, and they must accommodate changes in technology. Nor are we persuaded by Bell-South that identification of network elements should be left solely to the parties. We reject this approach for the same reasons that led us to adopt national unbundling requirements. 656 Finally, we agree with NYNEX and others that we should not identify elements in rigid terms. but rather by function.

260. We agree with MCI and MFS that the definition of the term network element includes physical facilities, such as a loop, switch, or other node, as well as logical features, functions, and capabilities that are provided by, for example, software located in a physical facility such as a switch. We further agree with MCI that the em-

⁵⁵³ See infra, Section V.J.

^{554 /}d.

⁵⁵⁵ See, e.g., District of Columbia Commission comments at 21-22; MFS comments at 36.

⁶⁵⁶ See supra, Sections II.A, II.B, V.B.

⁵⁵⁷ MCI comments at 27-28; MFS comments at 36-37.

bedded features and functions within a network element are part of the characteristics of that element and may not be removed from it. Accordingly, incumbent LECs must provide network elements along with all of their features and functions, so that new entrants may offer services that compete with those offered by incumbents as well as new services.

- 261. The only limitation that the statute imposes on the definition of a network element is that it must be "used in the provision of a telecomm ...cations service." 658 Incumbent LECs provide telecommunications services not only through network facilities that serve as the basis for a particular service, or that accomplish physical delivery, but also through information (such as billing information) that enables incumbents to offer services on a commercial basis to consumers. Our interpretation of the term "provision" finds support in the definition of the term "network element." That definition provides that the type of information that may constitute a feature or function includes information "used in the transmission, routing or other provision of a telecommunications service." 600 Since "transmission" and "routing" refer to physical delivery, the phrase "or other provision of a telecommunications service" goes beyond mere physical delivery.
- 262. We conclude that the definition of the term "network element" broadly includes all "facilit[ies] or equipment used in the provision of a telecommunications service," and all "features, functions, and capabilities that are provided by means of such facility or equipment, including subscriber numbers, databases, signaling systems, and information sufficient for billing and collection or used in the transmission, routing, or other provision of a telecommunications service." This definition thus includes, but is not limited to, transport trunks, call-related data-

^{588 47} U.S.C. § 153(29).

⁵⁸⁹ Id.

⁶⁶⁰ Id.

bases, software used in such databases, and all other unbundled elements that we identify in this proceeding. The definition also includes information that incumbent LECs use to provide telecommunications services commercially, such as information required for pre-ordering, ordering, provisioning, belling, and maintenance and repair services. This interpretation of the definition of the term "network element" will serve to guide both the Commission and the states in evaluating further unbundling requirements beyond those we identify in this proceeding.

263. We disagree with those incumbent LECs which argue that features that are sold directly to end users as retail services, such as vertical features, cannot be considered elements within incumbent LEC networks. 664 If we were to conclude that any functionality sold directly to end users as a service, such as call forwarding or caller ID, cannot be defined as a network element, then incumbent LECs could provide local service to end users by selling them unbundled loops and switch elements, and thereby entirely evade the unbundling requirement in section 251(c)(3). 665 We are confident that Congress did not intend such a result. We further reject Ameritech's argument that we should not permit carriers to use unbundled elements to provide services that are priced above cost at retail. We agree with those parties that argue that competition will not develop if we find that supracompetitive pricing is protected by the 1996 Act. 600

⁵⁶¹ See infra, V.J.

⁵⁶² See infra, Section V.J.5, for a definition of pre-ordering services.

⁵⁶³ The term "provisioning" includes installation.

⁶⁶⁴ See infra, Section V.J, discussing vertical features and noting that the Illinois Commission has rejected arguments that vertical features cannot be incorporated into network elements.

⁵⁶⁵ See, e.g., CompTel reply at 20-22.

⁵⁶⁶ See, e.g., DoJ reply at 23-31; CompTel reply at 13-22. For a discussion of the argument that allowing new entrants to purchase

264. Moreover, we agree with those commenters that argue that network elements are defined by facilities or their functionalities or capabilities, and thus, cannot be defined as specific services. A single network element could be used to provide many different services. For example, a local loop can be used to provision inter- and intrastate exchange access services, as well as local exchange services. We conclude, consistent with the findings of the Ohio and Oregon Commissions, that the plain language of section 251(c)(3) does not obligate carriers purchasing access to network elements to provide all services that an unbundled element is capable of providing or that are typically offered over that element.667 Section 251(c)(3) does not impose any service-related restrictions or requirements on requesting carriers in connection with the use of unbundled elements.

D. Access to Network Elements

1. Background

265. In the NPRM, we observed that section 251(c)(3) requires incumbent LECs to provide "access" to network elements "on an unbundled basis." We interpreted these terms to mean that incumbent LECs must provide carriers with the functionality of a particular element, separate from the functionality of other elements, and must charge a separate fee for each element. We sought comment on this interpretation and any alternative interpretations.

vertical features as unbundled elements would nullify section 251(c) (4), see infra, Section V.H.

⁸⁶⁷ Ohio Commission comments at 33; Oregon Commission comments at 27.

^{666 47} U.S.C. § 251(c)(3).

⁵⁶⁰ NPRM at para. 86.

3. Discussion

268. We conclude that we should adopt our proposed interpretation that the terms "access" to network elements "on an unbundled basis" mean that incumbent LECs must provide the facility or functionality of a particular element to requesting carriers, separate from the facility or functionality of other elements, for a separate fee. We further conclude that a telecommunications carrier purchasing access to an unbundled network facility is entitled to exclusive use of that facility for a period of time, or when purchasing access to a feature, function, or capability of a facility, a telecommunications carrier is entitled to use of that feature, function, or capability for a period of time. The specified period may vary depending on the terms of the agreement between the incumbent LEC and the requesting carrier. The ability of other carriers to obtain access to a network element for some period of time does not relieve the incumbent LEC of the duty to maintain, repair, or replace the unbundled network element.⁵⁷³ We reject PacTel's interpretation of the terms quoted above because it is inconsistent with our definition of the term network element (i.e., an element includes all features and functions embedded in it). Moreover, to the extent that PacTel's argument suggests that the 1996 Act does not require unbundled elements to be provisioned in a way that would make them useful, we find that its statutory interpretation is inconsistent with the statute's goal of providing new entrants with realistic means of competing against incumbents.

573 We clarify that title to unbundled network elements will not shift to requesting carriers.

E. Standards Necessary to Identify Unbundled Network Elements

1. Background

271. In the NPRM, we raised a number of issues concerning the meaning of technical feasibility in connection with unbundled elements. 500 We also sought comment on the extent to which the Commission should consider the standards set forth in section 251(d)(2) in identifying required unbundled elements, and on how we ought to interpret these standards. Subsection (d)(2) provides that "(i)n determining what network elements should be made available for purposes of subsection (c)(3), the Commission shall consider, at a minimum" the following two standards, "whether (A) access to such network elements as are proprietary in nature is necessary; and (B) the failure to provide access to such network elements would impair the ability of the telecommunications carrier seeking access to provide the services that it seeks to offer." 682 We further asked about the relationship between the latter standard and the requirement in section 251(c)(3) that carries be able to use unbundled elements to provide a telecommunications service. 683

2. Comments

272. Commenters raised two issues in interpreting the standard relating to whether access to proprietary elements is necessary. The first issue relates to whether incumbent LECs are required to provide proprietary information contained in network elements (e.g., Customer Premises Network Information contained in databases);

⁶⁸⁰ NPRM at paras. 87-88. See supra, Section IV.D, for a discussion of these issues.

⁸⁸¹ NPRM at para. 88.

^{682 47} U.S.C. § 251(d) (2).

sss NPRM at para. 90.

and the second to whether incumbent LECs are required to provide network elements which are proprietary (e.g., elements with proprietary protocols.) As to the first issue, Ameritech, SBC, BellSouth, PacTel, Texas Statewide Telephone Cooperative, Inc. and the Wyoming Commission argue that the Commission should protect proprietary information contained in incumbent LECs' networks. BellSouth and PacTel further argue that we should prohibit access to elements containing proprietary information unless new entrants meet a heavy burden demonstrating need.

273. As to the second issue, a few incumbent LECs argue generally that the Commission should require unbundling of proprietary network elements only under certain limited circumstances. USTA argues that, if we do not grant incumbent LECs the ability to deny their competitors access to proprietary elements, we will stifle the incumbents' incentives to provide innovative services and thereby inhibit competition. PacTel contends that we should not require unbundling of elements with proprietary protocols unless a new entrant demonstrates a heavy burden of need. Ameritech and GTE assert that we should require unbundling of proprietary elements only when the failure to do so would prevent a carrier from offering a service. GTE adds that, if an element is

⁵⁸⁴ Ameritech comments at 34; SBC comments at 36-37; Texas Statewide Telephone Cooperative, Inc. comments at 5-6; BellSouth comments at 35; PacTel comments at 40-44; Wyoming Commission at 24-26.

⁵⁸⁵ BellSouth comments at 35; PacTel comments at 40-44.

^{**} Ameritech comments at 34-35, reply at 11; BellSouth comments at 35; PacTel comments at 40-44; GTE comments at 30-31; GTE reply at 16; see also USTA comments at 27-28.

⁵⁸⁷ USTA comments at 27-28.

⁵⁸⁸ PacTel comments at 40-44, reply at 16-17; see also BellSouth comments at 35.

⁶⁸⁹ Ameritech comments at 34-35; Ameritech reply at 11; GTE comments at 30-31; GTE reply at 16.

available from other sources, unbundling should not be mandated. Moreover, according to GTE, if incumbent LECs do make proprietary elements available, they should be compensated for the use of their intellectual property. In contrast, the Consumer Federation of America asserts that, if we define proprietary elements broadly and require new entrants to demonstrate need before they may obtain them, we would significantly inhibit new entry. In the source of the s

274. Most BOCs and GTE contend that the general obligation imposed by section 251(c)(3) is limited by section 251(d)(2)'s standard of whether the failure to provide access to network elements would impair the ability of carriers to offer a service. They argue that this standard requires incumbent LECs to provide unbundled elements only where the failure to do so would prohibit a carrier from providing a service. Commenters offer two different standards by which we may determine whether a carrier may require an incumbent LEC to provide an unbundled element in order for the carrier to offer a service. First, GTE, PacTel and BellSouth argue that unbundling is not required if a carrier can obtain, or provide itself, the requested element on reasonable terms and conditions. The burden of meeting this standard, according to GTE, falls on the requesting carrier. If a carrier fails to meet this standard, but continues to request an element. BellSouth claims, that carrier must meet a

⁵⁹⁰ GTE comments at 30-31.

Government Affairs Director, AT&T to William F. Caton, Secretary, FCC, July 11, 1996 (AT&T July 11 Ex Parte).

BellSouth comments at 31-35; GTE comments at 30-31, GTE reply 16-17; Ameritech comments at 25-33; PacTel comments at 40-44, reply at 16-17; SBC comments at 36-37.

GTE comments at 30-31; PacTel comments at 40-44, reply at 17 n.38; BellSouth comments at 35.

GTE reply at 17.

heavier burden. Second, PacTel and Ameritech argue that, if a carrier can offer a service by purchasing the underlying service from the incumbent LEC and reselling it, pursuant to section 251(c)(4), the carrier is not impaired in its ability to offer the service. Thus, they argue, new entrants cannot use unbundled elements exclusively to offer the same services that new entrants can obtain from an incumbent LEC under the resale provision.

275. The Department of Justice and Comptel reject the BOCs' argument that the general obligation imposed by section 251(c)(3) is limited by consideration of whether the failure to provide access to an element would impair a carrier's ability to offer a service. They argue that the term "impair" does not mean "prevent," and that we should interpret this standard to mean that a carrier's ability to provide a service is impaired if obtaining an element from a third party is more costly than obtaining that same element from the incumbent. They also dispute the incumbent LECs' argument that the "impair" language in this standard means that new entrants cannot exclusively use unbundled elements to provide the same or similar retail services that an incumbent offers. They argue that, if similarity is enough to prevent the use of unbundled elements, then section 251(c)(3) would be nullified. They further contend that, under the BOCs' theory, incumbents could prevent new entry through the use of unbundled elements by offering unbundled loops, switching, and other elements as retail services. 607 Comp-Tel also argues that this standard refers back to the first standard in section 251(d)(2) and means that incumbents must provide proprietary elements only if the failure

⁸⁸⁸ BellSouth comments at 35.

see infra, Section V.H, for a further discussion of the relationship between sections 251(c) (3) and 251(c) (4).

⁵⁰⁷ See, e.g., DoJ comments at 48-51, reply at 23-31; CompTel reply at 13-22; see also, AT&T reply at 13-20.

to do so would prevent a requesting carrier from offering a telecommunications service. The service of the serv

276. AT&T argues that the plain language of section 251(c)(3) means that incumbent LECs must provide unbundled elements that new entrants request, and that the factors in section 251(d)(2) are minimum considerations and not threshold requirements. BellSouth and SBC agree that the "at minimum" language in section 251(d)(2) means the Commission can consider other factors not enumerated in the statute in determining what elements incumbent LECs must offer to requesting carriers. Similarly, several commenters suggest that, in determining which elements must be offered, we should consider a number of additional factors, including, for example, whether there is a demonstrable market demand for a particular element.

3. Discussion

277. Section 251(c)(3) and 251(d)(2) set forth standards the Commission must consider in identifying make available in connection with arbitrations before state unbundled network elements that incumbent LECs must commissions and BOC statements of generally available terms and conditions. These standards guide the unbundling requirements we issue today as well as any different or additional unbundling requirements we may issue in the future. Similarly, the states must follow our interpretation of these standards to the extent they impose additional

compTel comments at 24-25; see also AT&T July 11 Ex Parte.

⁸⁰⁰ See AT&T reply at 13-20.

^{***} BellSouth comments at 17, 26; SBC comments at 18.

⁶⁰¹ See, e.g., SBC comments at 25-37, 84-99; NYNEX comments at 61-64; Ameritech comments at 34; USTA comments at 23; see also Texas Public Utility Counsel comments at 9-11; CBT comments at 15; Nortel comments at 6; U S West comments at 45-47; ASCI comments at 32.

unbundling requirements during arbitrations or subsequent rulemaking proceedings.

278. Section 251(c)(3) requires incumbent LECs to provide requesting carriers with "nondiscriminatory access to network elements on an unbundled basis at any technically feasible point." 602 We find that this clause imposes on an incumbent LEC the duty to provide all network elements for which it is technically feasible to provide access on an unbundled basis. Because section 251(d)(1) requires us to "establish regulations to implement the requirements of" section 251(c)(3), we conclude that we have authority to establish regulations that are coextensive with the duty section 251(c)(3) imposes on incumbent LECs.

279. Section 251(d)(2), however, sets forth standards that do not depend on technical feasibility. More specifically, section 251(d)(2) provides that, in identifying unbundled elements, the Commission shall "consider, at a minimum," whether access to proprietary elements is necessary (the "proprietary standard"), and whether request-ing carriers' ability to provide services would be impaired if the desired elements were not provided by an incumbent LEC (the "impairment standard.") Thus, section 251(d)(2) gives us the authority to decline to require incumbent LECs to provide access to unbundled network elements at technically feasible points if, for example, we were to conclude that access to a particular proprietary element is not necessary. To give effect to both sections 251(c)(3) and 251(d)(2), we conclude that the proprietary and impairment standards in section 251(d)(2) grant us the authority to refrain from requiring incumbent LECs to provide all network elements for which it is technically feasible to provide access on an unbundled basis. The authority we derive from section 251(d)(2) is limited, however, by our interpretation of these standards, and this section, as set forth below.

^{602 47} U.S.C. § 251(c) (3).

- 280. We agree with BellSouth, SBC, and others that the plain import of the "at minimum" language in section 251(d)(2) requires us, in identifying unbundled network elements, to "consider" the standards enumerated there, as well as other standards we believe are consistent with the objectives of the 1996 Act. We conclude that the word "consider" means we must weigh the standards enumerated in section 251(d)(2) in evaluating whether to require the unbundling of a particular element.
- 281. We further conclude that, in evaluating whether to impose additional unbundling requirements during the arbitration process, states must apply our definition of technical feasibility, discussed above in section IV.D. A determination of technical feasibility would then create a presumption in favor of requiring an incumbent LEC to provide the element. If providing access to an unbundled element is technically feasible, a state must then consider the standards set forth in section 251(d)(2), as we interpret them below. Similarly, the Commission will apply this analysis where we must arbitrate specific unbundling issues, under section 252(e)(5), and in future rulemaking proceedings that may consider additional or possibly different unbundling requirements.
- 282. Section 251(d)(2)(A) requires the Commission and the states to consider whether access to proprietary elements is "necessary." "Necessary" means, in this context, that an element is a prerequisite for competition. We believe that, in some instances, it will be "necessary" for new entrants to obtain access to proprietary elements (e.g., elements with proprietary protocols or elements containing proprietary information), because without such elements, their ability to compete would be significantly impaired or thwarted. Thus, as an initial matter, we

that section 251(d)(2)(A) requires us to protect proprietary information, such as CPNI information, contained in network ele-

decline to adopt a general rule, as suggested by some incumbents, that would prohibit access to such elements, or make access available only upon a carrier demonstrating a heavy burden of need. We acknowledge that prohibiting incumbents from refusing access to proprietary elements could reduce their incentives to offer innovative services. We are not persuaded, however, that this is a sufficient reason to prohibit generally the unbundling of proprietary elements, because the threat to competition from any such prohibition would far exceed any costs to consumers resulting from reduced innovation by the incumbent LEC. Moreover, the procompetitive effects of our conclusion generally will stimulate innovation in the market, offsetting any hypothetical reduction in innovation by the incumbent LECs.

283. We further conclude that, to the extent new entrants seek additional elements beyond those we identify herein, section 251(d)(2)(A) allows the Commission and the states to require the unbundling of such elements unless the incumbent can prove to a state commission that: (1) the element is proprietary, or contains proprietary information that will be revealed if the element is provided on an unbundled basis; and (2) a new entrant could offer the same proposed telecommunications service through the use of other, nonproprietary unbundled elements within the incumbent's network. We believe this interpretation of section 251(d)(2)(A) will best advance the procompetitive purposes of the 1996 Act. It allows

ments. We intend to treat issues regarding CPNI in our rulemaking proceeding on CPNI information. Telecommunications Carriers' Use of Customer Proprietary Network Information and Other Customer Information, CC Docket No. 96-115, Notice of Proposed Rulemaking, FCC 96-221 (rel. May 17, 1996).

⁶⁰⁴ In this proceeding, for example, we are requiring incumbent LECs to provide the local switching element which includes vertical features that some carriers contend are proprietary. See infra, Section V.J.

new entrants to obtain proprietary elements from incumbent LECs where they are necessary to offer a telecommunications service, and, at the same time, it gives incumbents the opportunity to argue, before the states or the Commission, against unbundling proprietary elements where a new entrant could offer the same service using other unbundled elements in the incumbent's network. We decline to adopt the interpretation of section 251 (d)(2)(A) advanced by some incumbents that incumbent LECs need not provide proprietary elements if requesting carriers can obtain the requested proprietary element from a source other than the incumbent. Requiring new entrants to duplicate unnecessarily even a part of the incumbent's network could generate delay and higher costs for new entrants, and thereby impede entry by competing local providers and delay competition, contrary to the goals of the 1996 Act.

284. We further conclude that, to the extent new entrants do not need access to all the proprietary information contained within an element in order to provide a telecommunications service, the Commission and the states may take action to protect the proprietary information. For example, to provide a telecommunications service, a new entrant might need access to information about a particular customer that is in an incumbent LEC database. The database to which the new entrant requires access, however, may contain proprietary information about all of the incumbent LECs' customers. In this circumstance, the new entrant should not have access to proprietary information about the incumbent LEC's other customers where it is not necessary to provide service to the new entrant's particular customer. Accordingly, we believe the Commission and the states have the authority to protect the confidentiality of proprietary information in an unbundled network element, such as a database, where that information is not necessary to enable a new entrant to offer a telecommunications service to its particular customer.

- 285. Section 251(d)(2)(B) requires us to consider whether the failure to provide access to an element would "impair" the ability of a new entrant to provide a service it seeks to offer. The term "impair" means "to make or cause to become worse; diminish in value." 608 We believe. generally, that an entrant's ability to offer a telecommunications service is "diminished in value" if the quality of the service the entrant can offer, absent access to the requested element, declines and/or the cost of providing the service rises. We believe we must consider this standard by evaluating whether a carrier could offer a service using other unbundled elements within an incumbent LEC's network. Accordingly, we interpret the "impairment" standard as requiring the Commission and the states, when evaluating unbundling requirements beyond those identified in our minimum list, to consider whether the failure of an incumbent to provide access to a network element would decrease the quality, or increase the financial or administrative cost of the service a requesting carrier seeks to offer, compared with providing that service over other unbundled elements in the incumbent LEC's network.
- 286. We decline to adopt the interpretation of the "impairment" standard advanced by most BOCs and GTE. Under their interpretation, incumbent LECs must provide unbundled elements only when the failure to do so would prevent a carrier from offering a service. We also reject the related interpretations that carriers are not impaired in their ability to provide a service if they can obtain elements from another source, or if they can provide the proposed service by purchasing the service at wnolesale rates from a LEC. In general, and as discussed above, section 251(c)(3) imposes on incumbent LECs

sos See Random House College Dictionary 665 (rev. ed. 1984).

the obligation to offer on an unbundled basis all network elements for which it is technically feasible to provide access. We believe the plain language of section 251 (d)(2), and the standards articulated there, give us the discretion to limit the general obligation imposed by subsection 251(c)(3), but they do not require us to do so. The standards set forth in section 251(d)(2) are minimum considerations that the Commission shall take into account in evaluating unbundling requirements. Accordingly, we conclude that the statute does not require us to interpret the "impairment" standard in a way that would significantly diminish the obligation imposed by section 251(c)(3).

287. The interpretation advanced by most of the BOCs and GTE, described above, means that, if a requesting carrier could obtain an element from a source other than the incumbent, then the incumbent need not provide the element. We agree with the reasoning advanced by some of the commenters that this interpretation would nullify section 251(c)(3) because, in theory, any new entrant could provide all of the elements in the incumbents' networks. Congress made it possible for competitors to enter local markets through the purchase of unbundled elements because it recognized that duplication of an incumbent's network could delay entry, and could be inefficient and unnecessary. 606 The interpretation proffered by the BOCs and GTE would inhibit new entry and thus restrict the potential for meaningful competition, which would undermine the procompetitive goals of the 1996 Act. As a practical matter, if it is more efficient and less costly for new entrants to obtain network elements from a source other than an incumbent LEC, new entrants will likely pursue the more efficient and less costly approach. Additionally, as discussed above at section IV.C, we believe that allowing incumbent LECs to deny access to

⁶⁰⁶ See LDDS comments at 37, reply at 14-15.

unbundled elements on the grounds that an element is equivalent to a service available at resale would lead to impractical results, because incumbents could completely avoid section 251(c)(3)'s unbundling obligations by offering unbundled elements to end users as retail services.⁶⁰⁷

- 288. Finally, we decline at this time to adopt any of the additional criteria proposed by commenters. We conclude that none of the additional factors suggested by commenters enhances our ability to identify unbundled network elements consistent with the procompetitive goals of the 1996 Act. These additional considerations would limit unbundling requirements or make it administratively more difficult for new entrants to obtain additional unbundled elements beyond those identified in our minimum list of required elements. For example, we believe that the proposal that new entrants must provide detailed estimates regarding projected market demand is not necessary for incumbent LECs to efficiently plan for network growth.
- 307. We agree with those commenters, including the Florida, Illinois and Washington Commissions, that to achieve the procompetitive goals of the 1996 Act, it is necessary to establish rules that define the obligations of incumbent LECs to provide nondiscriminatory access to unbundled network elements, and to provide such elements on terms and conditions that are just, reasonable and non-discriminatory.⁶⁷¹ As discussed above at sections II.A,

⁶⁰⁷ See infra, Section V.H, for a further discussion on the relationship between sections 251(c)(3) and 251(c)(4).

⁶⁰⁸ See, e.g., Texas Public Utility Counsel comments at 9-11; Cincinnati Bell comments at 15; Nortel comments at 6 (the diversion of research and development efforts to facilities that new entrants do not really want will stifle innovation); SBC comments at 25-37, 84-99.

⁶⁷¹ See infra, Section VII, for a discussion of just, reasonable and nondiscriminatory rates for unbundled network elements.

II.B. and V.B., we believe that incumbent LECs have little incentive to facilitate the ability of new entrants, including small entities, to compete against them and, thus, have little incentive to provision unbundled elements in a manner that would provide efficient competitors with a meaningful opportunity to compete. We are also cognizant of the fact that incumbent LECs have the incentive and the ability to engage in many kinds of discrimination. For example, incumbent LECs could potentially delay providing access to unbundled network elements, or they could provide them to new entrants at a degraded level of quality.

308. Consistent with arguments advanced by the Florida and Washington Commissions, incumbent LECs, and potential competitors, and as more fully discussed in the specific sections below, we adopt general, national rules defining "nondiscriminatory access" to unbundled network elements, and "just, reasonable, and nondiscriminatory" terms and conditions for the provision of such elements. We have chosen this approach, rather than allowing states exclusively to consider these issues, because we believe that some national rules regarding nondiscriminatory access will reduce the costs of entry and speed the development of competition. 672

 Nondiscriminatory Access to Unbundled Network Elements

312. We conclude that the obligation to provide "nondiscriminatory access to network elements on an unbundled basis" 674 refers to both the physical or logical connection to the element and the element itself. In considering how to implement this obligation in a manner that would achieve the 1996 Act's goal of promoting

⁶⁷² See supra, Section V.B.

^{674 47} U.S.C. § 251(c)(3).

local exchange competition, we recognize that new entrants, including small entities, would be denied a meaningful opportunity to compete if the quality of the access to unbundled elements provided by incumbent LECs, as well as the quality of the elements themselves, were lower than what the incumbent LECs provide to themselves. Thus, we conclude it would be insufficient to define the obligation of incumbent LECs to provide "nondiscriminatory access" to mean that the quality of the access and unbundled elements incumbent LECs provide to all requesting carriers is the same. As discussed above with respect to interconnection, 675 an incumbent LEC could potentially act in a nondiscriminatory manner in providing access or elements to all requesting carriers, while providing preferential access or elements to itself. Accordingly, we conclude that the phrase "nondiscriminatory access" in section 251(c)(3) means at least two things: first, the quality of an unbundled network element that an incumbent LEC provides, as well as the access provided to that element, must be equal between all carriers requesting access to that element; second, where technically feasible, the access and unbundled network element provided by an incumbent LEC must be at least equal-inquality to that which the incumbent LEC provides to itself. 676

3. Discussion

328. The language of section 251(c)(3) is cast exclusively in terms of obligations imposed on incumbent LECs, and it does not discuss, reference, or suggest a limitation or requirement in connection with the right of new en-

⁶⁷⁵ See supra, Sections IV.G, IV.H.

⁶⁷⁶ We note that providing access or elements of lesser quality than that enjoyed by the incumbent LEC would also constitute an "unjust" or "unreasonable" term or condition.

trants to obtain access to unbundled elements. We conclude, therefore, that Congress did not intend section 251(c)(3) to be read to contain any requirement that carriers must own or control some of their own local exchange facilities before they can purchase and use unbundled elements to provide a telecommunications service. We note that the Illinois Commission has reached the same conclusion.⁷⁰⁷

329. We reject the arguments advanced by Bell Atlantic and NYNEX that the language of section 251(c)(3) requires carriers seeking access to unbundled elements to own some local exchange facilities, and that this serves to distinguish section 251(c)(3) from section 251(c)(4). The "at any technically feasible point" language in section 251(c)(3) refers to points in an incumbent LEC's network where new entrants may obtain access to elements. It does not, however, require that new entrants interconnect local exchange facilities which they own or control at that technically feasible access point. If we were to conclude otherwise, then new entrants would be prohibited from requesting two network elements that are connected to each other because the new entrant would be required to connect a single network element to a facility of its own. The 1996 Act, however, does not impose any limitations on carriers' ability to obtain access to unbundled network elements. Moreover, we conclude that Congress did not intend to limit access to unbundled elements in this manner because such a limit would seriously inhibit the ability of potential competitors to enter local markets through the use of unbundled elements, and thus would retard the development of local exchange competition. We also reject NYNEX's argument that the phrase "such telecommunications service" excludes services provided by the incumbent. This interpretation is inconsistent with the

⁷⁰⁷ AT&T Communications of Illinois, Inc. et al., Petition for a Total Local Exchange Wholesale Service Tariff from Illinois Bell Telephone Company, Nos. 95-0458 and 95-0531 (consol.) at 63-65 (Illinois Commission June 26, 1996).

1996 Act's definition of a telecommunications service, which includes all telecommunications services provided by an incumbent.

- 330. We also reject the argument that language in the Joint Explanatory Statement requires us to conclude that carriers must own facilities to obtain access to unbundled elements. Congress may have recognized that carriers that own some of their own facilities will more likely benefit by entering local markets through unbundled elements rather than resale, but this consideration does not imply that carriers must own their own facilities to obtain access to unbundled elements. 708
- 331. We are not persuaded that, in order to give meaning and effect to section 251(c)(4), we must require new entrants to own some local exchange facilities in order to obtain access to unbundled elements. We disagree with the premise that no carrier would consider entering local markets under the terms of section 251(c)(4) if it could use recombined network elements solely to offer the same or similar services that incumbents offer for resale. We believe that sections 251(c)(3) and 251 (c)(4) present different opportunities, risks, and costs in connection with entry into local telephone markets, and that these differences will influence the entry strategies of potential competitors. We therefore find that it is unnecessary to impose a limitation on the ability of carriers to enter local markets under the terms of section 251(c)(3) in order to ensure that section 251(c)(4) retains functional validity as a means to enter local phone markets.
- 332. The principal distinction between sections 251 (c)(3) and 251(c)(4), in terms of the opportunities each section presents to new entrants, is that carriers using solely unbundled elements, compared with carriers purchasing services for resale, will have greater opportunities to offer services that are different from those offered by

⁷⁰⁸ See Joint Explanatory Statement at 148.

incumbents. More specifically, carriers reselling incumbent LEC services are limited to offering the same service an incumbent offers at retail. This means that resellers cannot offer services or products that incumbents do not offer. The only means by which a reseller can distinguish the services it offers from those of an incumbent is through price, billing services, marketing efforts, and to some extent, customer service. The ability of a reseller to differentiate its products based on price is limited, however, by the margin between the retail and wholesale price of the product.

- 333. In contrast, a carrier offering services solely by recombining unbundled elements can offer services that differ from those offered by an incumbent. For example, some incumbent LECs have capabilities within their networks, such as the ability to offer Centrex, which they do not use to offer services to consumers. Carriers purchasing access to unbundled elements can offer such services. Additionally, carriers using unbundled elements can bundle services that incumbent LECs sell as distinct tariff offerings, as well as services that incumbent LECs have the capability to offer, but do not, and can market them as a bundle with a single price. The ability to package and market services in ways that differ from the incumbent's existing service offerings increases the requesting carrier's ability to compete against the incumbent and is likely to benefit consumers. 709 Additionally, carriers solely using unbundled network elements can offer exchange access services. These services, however, are not available for resale under section 251(c)(4) of the 1996 Act. 710
- 334. If a carrier taking unbundled elements may have greater competitive opportunities than carriers offering services available for resale, they also face greater risks.

⁷⁰⁹ See AT&T comments at 25-31.

⁷¹⁰ See infra, Section VII; see also Letter from Bernard J. Ebbers, President LDDS WorldCom, to Rachelle B. Chong, Commissioner, Federal Communications Commission, July 11, 1996.

A carrier purchasing unbundled elements must pay for the cost of that facility, pursuant to the terms and conditions agreed to in negotiations or ordered by states in arbitrations.711 It thus faces the risk that end-users customers will not demand a sufficient number of services using that facility for the carrier to recoup its cost. (Many network elements can be used to provide a number of different services.) A carrier that resells an incumbent LEC's services does not face the same risk. This distinction in the risk borne by carriers entering local markets through resale as opposed to unbundled elements is likely to influence the entry strategies of various potential competitors. Some new entrants will be unable or unwilling to bear the financial risks of entry by means of unbundled elements and will choose to enter local markets under the terms of section 251(c)(4) irrespective of the fact that they can obtain access to unbundled elements without owning any of their own facilities.712 Moreover, some markets may never support new entry through the use of unbundled elements because new entrants seeking to offer services in such markets will be unable to stimulate sufficient demand to recoup their investment in unbundled elements. Accordingly, in these markets carriers will enter through the resale of incumbent LEC services, irrespective of the fact that they could enter exclusively through the use of unbundled elements. 713

335. We are not persuaded by the argument set forth by Ameritech, NYNEX, and MFS that allowing carriers to use solely recombined network elements would eviscerate the joint marketing restriction in section 271 (e)(1).714 It is true that the terms of section 271(e) do

⁷¹¹ See infra, Section VII, describing the terms under which new entrants will pay for the cost of unbundled elements.

⁷¹² See, e.g., AT&T reply at 13-20.

⁷¹³ See, e.g., Comptel reply at 13-16.

⁷¹⁴ Section 271(e)(1) provides that "[u]ntil a Bell operating company is authorized pursuant to subsection (d) to provide inter-

not restrict joint marketing through the use of unbundled elements pursuant to section 251(c)(3). As discussed above, differences in opportunities and risk will cause some new entrants to consider entering local telephone markets through resale of incumbent LEC services, even if they could enter solely through the use of unbundled elements. Thus, we conclude that section 271(e)(1) will impose a meaningful limitation on joint marketing.

336. We note, moreover, that the 1996 Act does not prohibit all forms of joint marketing. For example, it does not prohibit carriers who own local exchange facilities from jointly marketing local and interexchange service. Nor does it prohibit joint marketing by carriers who provide local exchange service through a combination of local facilities which they own or possess, and unbundled elements. Because the 1996 Act does not prohibit all forms of joint marketing, we see no principled basis for reading into section 721(e)(1) a further limitation on the ability of carriers to jointly market local and long distance services without concluding that this section prohibits all forms of joint marketing. In other words, we see no basis upon which we could conclude that section 271(e)(1) restricts joint marketing of long distance services, and local services provided solely through the use of unbundled network elements, without also concluding that the section restricts the ability of carriers to jointly market long distance services and local services that are provided through a combination of a carriers' own facilities and unbundled network elements.715 Moreover, we do not believe that we have

LATA services in an in-region State, or until 36 months have passed since the date of enactment . . . a telecommunications carrier that serves greater than 5 percent of the Nation's presubscribed access lines may not jointly market in such State telephone exchange service obtained from such company pursuant to section 251(c)(4) with interLATA services." 47 U.S.C. § 271(e)(1).

⁷¹⁵ See also AT&T reply at 14-15 (the added risk of unbundled elements also means that new entrants are not circumventing section 271's joint marketing restriction because the additional risk

the discretion to read into the 1996 Act a restriction on competition which is not required by the plain language of any of its sections.

- 337. We also reject the argument advanced by Bell-South and Ameritech that allowing carriers to use solely unbundled elements to provide services available through resale would allow carriers to evade a possible prohibition, which is reserved to the discretion of the states, on the sale of certain services to certain categories of consumers. Under section 251(c)(4)(B) states are permitted to restrict resellers from offering certain services to certain consumers, in the same manner that states restrict incumbent LECs. The For example, states that prohibit incumbent LECs from selling to business consumers residential services priced below cost have the ability to restrict resellers from selling such services to business consumers.
- 338. We do not believe, however, that carriers using solely unbundled elements to provide local exchange services will be able to evade any potential restrictions states may impose under section 251(c)(4)(B). In this section Congress granted the states the discretion to impose certain limited restrictions on the sale of services available for resale. It did not, however, grant states, in section 251(c)(3), the same discretion to impose similar restrictions on the use of unbundled elements. Accordingly, we are not persuaded that allowing carriers to use solely unbundled elements to provide services that incumbent LECs offer for resale would allow competing carriers to evade a possible marketing restriction that Congress intended to reserve to the discretion of the states.
- 339. We agree with those commenters who argue that it would be administratively impossible to impose a re-

justifies allowing carriers more flexibility to jointly market services); LDDS reply at 28-30.

^{716 47} U.S.C. § 251(c)(4)(B).

quirement that carriers must own some of their own local exchange facilities in order to obtain access to unbundled elements, and they must use these facilities, in combination with unbundled elements, for the purpose of providing local services. We conclude that it would not be possible to identify the elements carriers must own without creating incentives to build inefficient network architectures that respond not to marketplace factors, but to regulation. We further conclude that such a requirement could delay possible innovation. These effects would diminish competition for local telephone services, and thus any local exchange facilities requirement would be inconsistent with the 1996 Act's goals of promoting competition. Moreover, if we imposed a facilities ownership requirement that attempted to avoid these competitive pitfalls, it would likely be so easy to meet it would ultimately be meaningless.

340. We reject the argument that requiring carriers to own some local exchange facilities would promote competition for local exchange services, or that we should impose such a requirement for other policy reasons. To the contrary, we conclude that allowing carriers to use unbundled elements as they wish, subject only to the maintenance of the key elements of the access charge regime, described below at section VII, will lead to more efficient competition in local phone markets. If we were to limit access to unbundled network elements to those markets where carriers already own, or could efficiently build, some local exchange facilities, we would limit the ability of carriers to enter local markets under the pricing standard for unbundled elements to those markets that could efficiently support duplication of some or all of the incumbent LECs' networks. We believe that such a result could diminish competition, and that allowing new entrants to take full advantage of incumbent LF Cs' scale and scope economies will promote more rapid and efficient entry and will result in more robust competition.

341. Finally, we conclude that a new entrant may offer services to one group of consumers using unbundled network elements, and it may offer services to a separate group of consumers by reselling an incumbent LEC's services. With the exception noted in Section VII, infra, we do not address the issue of whether the 1996 Act permits a new entrant to offer services to the same set of consumers through a combination of unbundled elements and services available for resale.

3. Discussion

356. We confirm our tentative conclusion in the NPRM that section 251(c)(3) permits interexchange carriers and all other requesting telecommunications carriers. to purchase unbundled elements for the purpose of offering exchange access services, or for the purpose of providing exchange access services to themselves in order to provide interexchange services to consumers.761 Although we conclude below that we have discretion under the 1934 Act, as amended by the 1996 Act, to adopt a limited, transitional plan to address public policy concerns raised by the bypass of access charges via unbundled elements, we believe that our interpretation of section 251(c)(3) in the NPRM is compelled by the plain language of the 1996 Act. As we observed in the NPRM, section 251 (c)(3) provides that requesting telecommunications carriers may seek access to unbundled elements to provide a "telecommunications service," and exchange access and interexchange services are telecommunications services. Moreover, section 251(c)(3) does not impose restrictions on the ability of requesting carriers "to combine such elements in order to provide such telecommunications service[s]." 762 Thus, we find that there is no statutory basis upon which we could reach a different conclusion for the long term.

⁷⁶¹ See NPRM at paras. 159-65.

^{762 47} U.S.C. § 251(c)(3).

- that, for the reasons discussed below in section V.J, carriers purchase rights to exclusive use of unbundled loop elements, and thus, as the Department of Justice and Sprint observe, such carriers, as a practical matter, will have to provide whatever services are requested by the customers to whom those loops are dedicated. This means, for example, that, if there is a single loop dedicated to the premises of a particular customer and that customer requests both local and long distance service, then any interexchange carrier purchasing access to that customer's loop will have to offer both local and long distance services. That is, interexchange carriers purchasing unbundled loops will most often not be able to provide solely interexchange services over those loops.
- 358. We reject the argument advanced by a number of incumbent LECs that section 251(i) demonstrates that requesting carriers using unbundled elements must continue to pay access charges. Section 251(i) provides that nothing in section 251 "shall be construed to limit or otherwise affect the Commission's authority under section 201." 763 We conclude, however, that our authority to set rates for these services is not limited or affected by the ability of carriers to obtain unbundled elements for the purpose of providing interexchange services. Our authority to regulate interstate access charges remains unchanged by the 1996 Act. What has potentially changed is the volume of access services, in contrast to the number of unbundled elements, interexchange carriers are likely to demand and incumbent LECs are likely to provide. When interexchange carriers purchase unbundled elements from incumbents, they are not purchasing exchange access "services." They are purchasing a different product, and that product is the right to exclusive access or use of an entire element. Along this same line of reasoning, we reject the argument that our conclusion would place the

^{763 47} U.S.C. § 251(i).

administration of interstate access charges under the authority of the states. When states set prices for unbundled elements, they will be setting prices for a different product than "interstate exchange access services." Our exchange access rules remain in effect and will still apply where incumbent LECs retain local customers and continue to offer exchange access services to interexchange carriers who do not purchase unbundled elements, and also where new entrants resell local service. 764

- 359. We also reject the incumbent LECs' arguments that language contained in bills that were not enacted, or legislative history connected to such bills, demonstrates that carriers cannot purchase access to unbundled elements to provide exchange access services to themselves, for the purpose of providing long distance services to consumers. The incumbent LECs are arguing in effect, that we should read into the current statute a limitation on the ability of carriers to use unbundled network elements, despite the fact that no such limitation survived the Conference Committee's amendments to the 1996 Act. We conclude, however, that the language of section 251(c)(3), which provides that telecommunications carriers may purchase unbundled elements in order to provide a telecommunications service 765 is not ambiguous. Accordingly, we must interpret it pursuant to its plain meaning and not by referencing earlier versions of the statute that were ultimately not adopted by Congress.
- 360. Moreover, we do not believe that the Joint Explanatory Statement, which describes the House and Senate versions of the statute, and the 1996 Act as enacted, compels a different conclusion. The Joint Explanatory Statement states that the statute incorporates provisions

⁷⁶⁴ The application of our exchange access rules in the circumstances described will continue beyond the transition period described at *infra*, Section VII.

^{765 47} U.S.C. § 251(e)(3).

from the Senate Bill and the House Amendment in connection with the interconnection model adopted in section 251.766 It notes that the provision in the Senate Bill relating to interconnection did not apply to interconnection arrangements between local and long distance carriers for the purpose of providing long distance services.767 The text of section 251 of the Senate Bill is consistent with this comment because it states that a local exchange carrier must offer interconnection to other carriers to allow such carriers to provide telephone exchange or exchange access services. 768 The Joint Explanatory Statement, however, does not describe any restriction in the House Amendment regarding the ability of carriers to use unbundled elements to provide long distance service.769 Indeed, the House Amendment specifically states that carriers may obtain access to unbundled elements to offer "a telecommunications service," which is not limited to telephone exchange and exchange access services.770 We observe that the Conference Committee incorporated language from the House Amendment and not the Senate Bill in describing in section 251(c)(3) the services carriers may offer using unbundled elements. Accordingly, we do not believe that the Joint Explanatory Statement's description of the provision in the Senate Bill controls our interpretation of section 251(c)(3) as enacted.

361. We also reject the argument that allowing carriers to use unbundled elements to provide originating and terminating toll services is inconsistent with the purposes of the 1996 Act. Congress intended the 1996 Act to promote competition for not only telephone exchange services

⁷⁶⁶ Joint Explanatory Statement at 117-123.

⁷⁶⁷ Id. at 117.

⁷⁶⁸ S. 652, 104th Cong., 1st Sess. § 251 (1995).

⁷⁶⁹ Joint Explanatory Statement at 120-121.

⁷⁷⁰ H.R. 1555, 104th Cong., 1st. Sess. § 242 (1995).

and exchange access services, but also for toll services. Section 251(b)(3), for example, imposes a duty on LECs to provide dialing parity for telephone toll service.

- 362. We disagree with the incumbent LECs which argue that section 251(g) requires requesting carriers using unbundled elements to continue to pay federal and state access charges indefinitely. Section 251(g) provides that the federal and state equal access rules applicable before enactment, including the "receipt of compensation," will continue to apply after enactment, "until such restrictions and obligations are explicitly superseded by regulations prescribed by the Commission after such date of enactment." 771 We believe this provision does not apply to the exchange access "services" requesting carriers may provide themselves or others after purchasing unbundled elements. Rather, the primary purpose of section 251(g) is to preserve the right of interexchange carriers to order and receive exchange access services if such carriers elect not to obtain exchange access through their own facilities or by means of unbundled elements purchased from an incumbent.
- that, telecommunications carriers purchasing unbundled network elements to provide interexchange services or exchange access services are not required to pay federal or state exchange access charges except as described in section VII, *infra*, for a temporary period. As we explained in the NPRM, if we were to require indefinitely carriers purchasing unbundled elements to also pay access charges, then incumbent LECs would receive compensation in excess of their underlying network costs. This result would be inconsistent with the pricing standard for unbundled elements set forth in section 252(d)(1).772 In addition,

^{771 47} U.S.C. § 251(g).

⁷⁷² See infra, Section VII. We also note that where new entrants purchase access to unbundled network elements to provide exchange

we believe this conclusion is consistent with Congress's overriding goal of promoting efficient competition for local telephony services, because it will allow, in the long term, new entrants using unbundled elements to compete on the basis of the economic costs underlying the incumbent LEC's networks. The facilities used to provide exchange access services are the same as those used to provide local exchange services. We note, however, as discussed below,⁷⁷³ that certain additional charges are necessary for a specific, limited duration to smooth the transition to a competitive marketplace.

364. We further conclude that when a carrier purchases a local loop for the purpose of providing interexchange services or exchange access services, 774 incumbent LECs may not recover the subscriber line charge (SLC) now paid by end users. The SLC recovers the portion of loop costs allocated to the interstate jurisdiction, but as discussed in Section II.C, supra, we conclude that the 1996 Act creates a new jurisdictional regime outside of the current separations process. The unbundled

access services, whether or not they are also offering toll services through such elements, the new entrants may assess exchange access charges to IXCs originating or terminating toll calls on those elements. In these circumstances, incumbent LECs may not assess exchange access charges to such IXCs because the new entrants, rather than the incumbents, will be providing exchange access services, and to allow otherwise would permit incumbent LECs to receive compensation in excess of network costs in violation of the pricing standard in section 252(d). See 47 U.S.C. § 252. We further note, however, that in these same circumstances the new entrant purchasing access to an unbundled switch element must pay to the incumbent LEC the charges included in the transitional mechanism, described infra, at Section VII, for a temporary period.

⁷⁷³ See infra, Section VII, discussing an interim mechanism addressing near-term access charge bypass.

⁷⁷⁴ As discussed at *infra*, Section VIII, a different result will occur when interconnecting carriers purchase LEC retail services at wholesale rates under section 251(c)(4).

loop charges paid by new entrants under section 251 (c)(3) will therefore recover the unseparated cost of the loop, including the interstate component now recovered through the SLC. If end users or carriers purchasing access to local loops were required to pay the SLC in this situation, LECs would enjoy double recovery, and the effective price of unbundled loops would exceed the cost-based levels required under section 251(d)(1).

365. Finally, we have considered the economic impact on small incumbent LECs of our conclusion that carriers purchasing access to unbundled network elements to provide interexchange or exchange access services are not required to pay federal or state access charges, except as described in Section VII, infra, for a temporary period. For example, the Rural Telephone Coalition argues that rural ratepayers could be subject to higher local service rates if interexchange carriers are allowed to bypass access charges through the purchase of unbundled elements before proceedings regarding access reform and universal service are completed. We reject the Rural Telephone Coalition's argument, however, because our rules, as discussed in Section VII, infra, provide for a limited, transitional plan to address public policy concerns raised by the bypass of access charges through unbundled network elements.

c. Discussion

377. We conclude that incumbent LECs must provide local loops on an unbundled basis to requesting carriers. We note that the Joint Explanatory Statement lists local loops as an example of an unbundled network element. As discussed below, the record demonstrates that it is technically feasible for incumbent LECs to provide access to unbundled local loops, and that such access is

⁸¹⁶ Joint Explanatory Statement at 116.

critical to encouraging market entry. Further, the competitive checklist contained in section 271 requires BOCs to offer unbundled loops separate from switching as a precondition to entry into the in-region, interLATA services market.817

380. We further conclude that the local loop element should be defined as a transmission facility between a distribution frame, or its equivalent, in an incumbent LEC central office, and the network interface device at the customer premises. This definition includes, for example, two-wire and four-wire analog voice-grade loops, and two-wire and four-wire loops that are conditioned to transmit the digital signals needed to provide services such as ISDN, ADSL, HDSL, and DS1-level signals. We note that a number of parties proposed definitions of the local loop that encompassed some or all of these loop types. In addition, we agree with ITIC that the ability to offer various digital loop functions in competition with incumbent LECs may be particularly beneficial to small entities by allowing them to serve niche markets.

^{817 47} U.S.C. § 271(e)(2)(B).

Rate Interface level permits the transmission of digital signals over the loop at the rate of 144 kbps, which provides two standard 64 kbps voice or data channels and a 16 kbps data channel. ISDN at the Primary Rate Interface permits 23 standard 64 kbps channels plus one 16 kbps data channel. ADSL (Asynchronous Digital Subscriber Line) is a transmission path that facilitates 6 Mbps digital signal downstream and 640 kbps digital signal upstream, while simultaneously carrying an analog voice signal. Two-wire HDSL (High-bit-rate Digital Subscriber Line) permits the transmission of a 768 kbps digital signal over a copper loop, while four-wire HDSL allows the transmission of 1,544 Mbps over two two-wire pairs.

See, e.g., MFS comments at 43-44; ALTS comments at 27; GST comments at 21-22; ACSI comments, Att. 1 at 2.

⁸²⁵ ITIC comments at 7-8.

382. Our definition of loops will in some instances require the incumbent LEC to take affirmative steps to condition existing loop facilities to enable requesting carriers to provide services not currently provided over such facilities. For example, if a competitor seeks to provide a digital loop functionality, such as ADSL, and the loop is not currently conditioned to carry digital signals, but it is technically feasible to condition the facility, the incumbent LEC must condition the loop to permit the transmission of digital signals. Thus, we reject BellSouth's position that requesting carriers "take the LEC networks as they find them" with respect to unbundled network elements. 428 As discussed above, some modification of incumbent LEC facilities, such as loop conditioning, is encompassed within the duty imposed by section 251 (c)(3).829 The requesting carrier would, however, bear the cost of compensating the incumbent LEC for such conditioning. 800

384. We find that it is technically feasible to unbundle IDLC-delivered loops. One way to unbundle an individual loop from an IDLC is to use a demultiplexer to separate the unbundled loop(s) prior to connecting the remaining loops to the switch. Commenters identify a number of other methods for separating out individual loops from IDLC facilities, including methods that do not require demultiplexing.⁸⁸¹ Again, the costs associated with these mechanisms will be recovered from requesting carriers.

⁸²⁸ BellSouth comments at 39.

see supra Section IV.D., interpreting the term "technically feasible." See also MFS comments at 43 (arguing that incumbent LECs condition loops in order to provide particular digital loop functionalities to their customers).

⁸⁸⁰ See supra Section VII, discussing the recovery of costs under section 252(d)(1).

⁸³¹ Under more recent standards for IDLC facilities, a competitor's loop traffic could be separated from the incumbent LEC's loop

388. Section 251(d)(2)(A) requires the Commission to consider whether "access to such network elements as are proprietary in nature is necessary." 835 Most parties did not identify any proprietary concerns associated with providing unbundled access to local loops. Ericsson notes that some "active" loop equipment, such as channel banks and remote terminal equipment, is often proprietary in nature, and that manufacturers would require time to modify such equipment to create end-to-end network compatibility on a national basis.836 Ericsson does not contend, however, that any proprietary information would be revealed if loops using such equipment were unbundled, or that use of such equipment should prevent loop unbundling in general.837 Thus, we conclude that loop elements are, in general, not proprietary in nature under our interpretation of section 251(d)(2)(A). Even if loop elements were proprietary in nature, however, Ericsson does not meet the second consideration in our section 251(d)(2)(A) standard, which requires a showing that a new entrant can offer the proposed telecommunications service through the use of other, nonproprietary elements in the incumbent LEC's network.838 Ericsson merely contends that manufacturers may need time to establish compatibility between its proprietary equipment and equipment of other manufacturers.839 Therefore, we find that Ericsson's concerns do not justify withholding unbun-

traffic without the use of multiplexers. See, e.g., MCI comments at 30 (IDLC loops can be moved onto other loop carrier links, or alternatively, can be removed from the multiplexed signal through "hair pinning").

^{835 47} U.S.C. § 251(d)(2)(A).

⁸³⁶ Ericsson comments at 4.

⁸³⁷ Ericsson's comments were in response to a question in the NPRM seeking comment on the need to accommodate new loop technologies or services. Ericsson comments at 4.

⁸³⁸ See supra Section V.E.3.

⁸³⁹ Ericsson comments at 4-5.

dled loops from requesting carriers pursuant to section 251(d)(2)(A).

- 389. Section 251(d)(2)(B) directs the Commission to consider whether "the failure to provide access to such network elements would impair the ability of the telecommunications carrier seeking access to provide the services that it seeks to offer." 840 We have interpreted the term "impair" to mean either increased cost or decreased service quality that would result from using network elements of the incumbent LEC other than the one sought.841 Commenters do not identify alternative facilities that would fulfill requesting carriers' need for transmission between the central office and the customer premises at the same cost and same quality of service. Accordingly, we conclude that competitors' ability to provide telephone exchange, exchange access, or other telecommunications services would be significantly impaired if they did not have the opportunity to purchase unbundled loops from incumbent LECs.
- 392. We require incumbent LECs to offer unbundled access to the network interface device (NID), 852 as a network element, as described below. When a competitor deploys its own loops, the competitor must be able to connect its loops to customers' inside wiring in order to provide competing service, especially in multi-tenant buildings. In many cases, inside wiring is connected to the incumbent LEC's loop plant at the NID. In order to provide service, a competitor must have access to this facility. Therefore, we conclude that a requesting carrier

^{840 47} U.S.C. § 251(d)(2)(B).

⁸⁴¹ See supra Section V.E.3.

⁸⁵² The NID is a cross-connect device used to connect loop facilities to inside wiring.

is entitled to connect its loops, via its own NID, to the incumbent LEC's NID.853

393. Pursuant to section 251(c)(3), we find that this arrangement clearly is technically feasible. Ameritech notes that it currently maintains such connections with competitors that have deployed their own loop facilities.854 This is persuasive evidence that unbundled access at the NID, in this manner, does not raise network reliability concerns. Under section 251(d)(2)(A), the record contains no evidence of proprietary concerns with unbundled access to the NID. In addition, under our interpretation of the "impair" test of section 251(d)(2)(B), commenters do not contend that new entrants could obtain the same functionality at the same cost and service quality through other network elements of the incumbent LEC. Moreover, the record indicates that certain network architectures used by new entrants, such as fiber rings, can most efficiently connect end users to the new entrant's switching office without use of the incumbent LEC's facilities.855 Thus, we conclude that the unavailability of access to incumbent LECs' NIDs would impair the ability of carriers deploying their own loops to provide service. Further, we believe that unbundled access to the NID will facilitate entry strategies premised on the deployment of loops. As discussed in section VII, above, the new

⁸⁵³ We emphasize that access to inside wiring through the incumbent LEC's NID does not entitle a competitor to deliver its loop facilities into a building without the permission of the building owner. Similarly, access to an incumbent LEC's NID does not entitle the competitor to the riser and lateral cables between the NID and individual units within the building, which may be owned or controlled, for example, by the premises owner.

⁸⁵⁴ Letter from James K. Smith, Director-Federal Relations, Ameritech, to William F. Caton, Acting Secretary, FCC, July 15, 1996 (Ameritech July 15 Ex Parte).

⁸⁵⁵ Letter from Don Sussman, MCI, to William F. Caton, FCC, July 12, 1996 (MCI July 12 Ex Parte).

entrant bears the costs connecting its NID to the incumbent LEC's NID.

2. Switching Capability

a. Background

397. In the NPRM, we tentatively concluded that incumbent LECs should be required to make available local switching capability as an unbundled network element. We sought comment on how a local switching element should be defined, and we identified two possible models: the switch "platform" approach, which would entitle and require a requesting carrier to purchase all of the features and functions of the switch on a per-line basis and the port approach used by the New York Commission, which offers local switching capability through the purchase of a port at a retail rate. We also sought comment on other definitions of a local switching element. In addition, we requested that commenters address whether vertical switching functions, such as those enabling the provision of custom local area signaling service (CLASS) features and call waiting, should be considered individual network elements separate from the basic switching functionality.

b. Comments

398. The vast majority of commenters support the Commission's tentative conclusion that local switching should be an unbundled network element. Such parties note that the section 271 competitive checklist includes unbundled local switching and the legislative history of the 1996 Act identifies local switching as a possible ele-

ses See, e.g., GCI comments at 12; TIA comments at 11-12; Citizens Utilities comments at 15; Intermedia comments at 13; Bay Springs, et al. comments at 18; Wyoming Commission comments at 22.

ment. Several potential local competitors contend that unbundled local switching functionality is very important to promote entry into the local exchange market. Set.

399. Some incumbent LECs support a definition of local switching as a switching port. These LECs favor a definition of a port that focuses on providing access to additional switching features, rather than on the switching features themselves. PacTel, for example, asserts that a port provides dialtone and a telephone number, but does not include local usage or vertical features such as custom calling. Bell Atlantic contends that the 1996 Act requires incumbent LECs to provide access to unbundled network elements, and that a switch port meets this directive by providing access to the switch. The switch of the switch.

400. Sprint, USTA, SBC, NYNEX, and MECA, on the other hand, favor a definition of the unbundled local switching element that includes the basic function of connecting network access lines to other lines or trunks. 872

USTA comments at 32; BeliSouth comments at 40.

Letter 18 at 17-18; but see SBC reply at 23 ("Given that 'high margin' services are made possible through the switch, new entrants will likely purchase their own switching facilities.").

⁸⁶⁸ BellSouth comments at 41; Cincinnati Bell comments at 18; U S West comments at 54-55; Bell Atlantic comments at 25; GTE comments at 37.

BellSouth comments at 41; Cincinnati Bell comments at 18; USTA comments at 33; U S West comments at 54-55; Bell Atlantic comments at 25; GTE comments at 37; NYNEX comments at 69-70.

ero PacTel comments at 55 (local usage should be excluded from the definition of a port because it is a tariffed service and should therefore be available to requesting carriers only through resale); see also SBC comments at 43 (the port should be separate from the switch).

⁸⁷¹ Bell Atlantic reply at 12.

⁸⁷² Sprint comments at 34; USTA reply at 16-17; SBC reply at 20; NYNEX reply at 31; MECA comments at 29.

These parties would expressly exclude from this local switching definition vertical features such as custom calling. Sprint and SBC argue that vertical features are retail services offered to end users today, and therefore, must be purchased by the competitor under the wholesale rate provisions of the Act. USTA suggests that this approach best comports with the Act and is a reasonable compromise between the more limited port approach and the switching platform proposal. STS

401. A number of commenters support a definition of the local switch that has been referred to as the "local switching platform." ⁸⁷⁶ These parties recommend defining the local switching element as encompassing all functions performed by the local switch, including basic switching functionality and vertical features. ⁸⁷⁷ Supporters

MECA comments at 36; USTA reply at 16; SBC reply at 20; MECA comments at 29. Exemples of vertical features include call waiting and three-way calling, which are custom calling features, and caller ID and call forwarding, which are custom local area signaling service (CLASS) features that rely on the transmission of signaling information between the calling and called parties.

see also Sprint comments at 37-38 (although it is not technically feasible to unbundle vertical services, the costs of such services can be identified and should be excluded from the charge for the local switching element).

⁸⁷⁸ USTA reply at 16.

MCI comments at 30-32; AT&T comments at 20-21; LDDS comments at 44-46; Texas Commission reply at 8; TCC comments at 37-38; ACTA comments at 18-20; ACSI comments at 40-41; CompTel comments at 33-35; Ad Hoc Telecommunications Users Committee reply at 8.

Functions listed by proponents of the switch platform include local usage, exchange access, access to operators, announcements, recognition of customer requests for service, obtaining call-specific information, data analysis, selection of traffic routes, call signaling, recording for billing and network management, tests required for network maintenance and call processing, custom calling features (e.g. call forwarding, call waiting), and CLASS features (e.g. caller

of the switching platform approach contend that, because the requesting carrier would pay for all local switching functionality on a per-line basis, it would have the incentive and ability to combine features and services more effectively than it would under more limited definitions of the local switching element.⁸⁷⁸

- 402. LDDS and AT&T argue that the switch platform approach is more consistent with the Act than the port approach. These carriers argue that, under the port approach, local switching has not been "unbundled" because a competitor cannot combine a port with loop and trunking facilities to provide telephone service. Instead, the competitor must also purchase basic switching functionality from the incumbent LEC at wholesale rates.** According to AT&T and LDDS, the switching platform does not raise technical feasibility problems because requesting carriers would not have direct access to the switching hardware or software. Instead, the requesting carrier would "designate" the features to be associated with its own lines and the routing of its customers' calls, and the incumbent LEC would actually perform that function.850
- 403. Opponents of the local switching platform assert that implementing a switch platform would cause technical problems. U S West and GVNW argue that the

ID, call return). LDDS comments at 44; ACSI comments at 40-41; MCI comments at 30. AT&T and LDDS also propose to include in the local switching definition Centrex, carrier identification code determination, and access to databases and adjunct processors for the purpose of offering advanced intelligent network (AIN) services. LDDS comments at 45; AT&T Mar. 21 Letter at 18.

⁸⁷⁸ LDDS comments at 45; AT&T comments at 21.

sion notes that Ameritech's unbundled port tariffs in Illinois expressly exclude basic switching functionality. Texas Commission comments at 13-14.

⁸⁸⁰ AT&T reply at 19; LDDS reply at 19.

only technically feasible way to implement the switching platform would be physically to partition the switch which, according to U S West, would greatly reduce the switch's efficiency.** AT&T characterizes this argument as frivolous and asserts that physical partitioning of the switch has not been proposed by any party.882 NYNEX contends that incumbent LECs would need to add capacity to their switches to accommodate competitors' demand for switch platforms.883 AT&T responds that, because the requesting carrier is likely to be serving former customers of the incumbent LEC, the switching resources needed by the incumbent and competitor, at least initially, are likely to balance out.884 GTE, U S West, and USTA also argue that the switching platform approach would discourage incumbent LECs from upgrading their switches because all new features would be immediately available to competitors at a discounted rate. 888

404. Incumbent LECs argue that the switch platform would allow a requesting carrier to circumvent the statutory scheme that requires incumbent LECs to offer local exchange service at wholesale rates for resale by requesting carriers. These commenters also contend that vertical features, such as custom calling and call waiting, are retail services, not network elements, and should be obtained by requesting carriers pursuant to section 251

⁸⁸¹ U S West comments at 55.

⁸⁸² AT&T reply at 19.

⁸⁸⁸ NYNEX reply at 32.

⁸⁸⁴ Letter from Bruce Cox, Government Affairs Director, AT&T, to William Caton, Secretary, FCC, June 28, 1996 (AT&T June 28 Ex Parte).

^{***} GTE comments at 38; SBC comments at 43; USTA reply at 17.

*** PacTel comments at 54; Bell Atlantic comments at 26; GTE reply at 20; **see also Sprint comments at 38 (the local switching platform does not create incentives for competitors to build out facilities).

- (c) (4).887 Ad Hoc Telecommunications Users maintains that the switch platform approach raises entry costs by forcing competitive providers to purchase switching functions they may never need or use.888 MCI and TCC contend that the local switching element should specifically include vertical features such as CLASS features and custom calling because incumbent LECs do not incur the costs for these services on a usage basis.880 ACSI and LCI also support the availability of vertical switching functionalities on an unbundled basis.800
- 405. Incumbent LECs contend that the switch platform approach is impractical because standard measures of switching, such as the number of line or trunk terminations, would not capture the dynamic nature of switching. In response, MCI and LDDS state that a requesting carrier would commit to purchasing a minimum level of trunk port capacity and a minimum level of busy hour switch capacity for at least one year. Several BOCs and Sprint contend that the Commission should not adopt the switch platform because there is insufficient understanding of what it would entail.
- 406. Most parties support the Commission's proposal to require incumbent LECs to unbundle tandem switching as a network element. Sol AT&T notes that the availability

⁸⁸⁷ USTA comments at 34-35; Cincinnati Bell comments at 18.

⁸⁸⁸ Ad Hoc Telecommunications Users Committee comments at 23.

⁸⁸⁹ MCI comments at 31; TCC comments at 31.

⁸⁹⁰ ACSI comments at 41; LCI comments at 18.

⁸⁸¹ USTA comments at 34; MECA comments at 30.

⁸⁸² MCI comments at 30; LDDS comments at 44-45.

⁸⁹³ Ameritech comments at 45; SBC comments at 42; Bell Atlantic reply at 11; Sprint comments at 39; NYNEX reply at 31.

see, e.g., AT&T comments at 22; New York Commission comments at 27; U S West comments at 48; MCI comments at 17; Competition Policy Institute comments at 16; GST comments at 24; TIA comments at 13.

of unbundled tandem switches is critical to the connection of its own switches to incumbent LECs' switches. AT&T argues that unbundled tandem switching is technically feasible because IXCs currently interconnect with incumbent LECs' tandem switches through standard specifications. Other commenters indicate that tandem switching is available today through access tariffs, and therefore it is unnecessary for the Commission to unbundle tandem switching. SBC states that the Commission should not apply the same unbundling requirements for tandem and end office switches because tandem switches only offer trunk interfaces and do not contain switching features on a per-line basis. Son

- 407. AT&T, MCI, and TCC also ask that the local switching element be defined to include data switching by packet switches. MCI asserts that it is technically feasible for the requesting carrier's own facilities to interface with an incumbent LEC's packet switch through a connection at a DS1 frame or patch panel. PacTel supports the unbundling of data switches as network elements.
- 408. Several potential local competitors argue that the Commission should require incumbent LECs, in providing unbundled local switching, to enable requesting carriers to designate the trunk assignment for its local exchange customers. CompTel states that this would maximize

⁸⁹⁸ AT&T Mar. 21 Letter at 21.

⁸⁹⁶ AT&T comments at 22; ALTS comments at 30.

⁸⁹⁷ Bell Atlantic comments at 27; TIA comments at 13.

⁸⁹⁸ SBC comments at 34 n.67.

at 18. AT&T comments at 20; TCC comments at 39; MCI comments

⁹⁰⁰ MCI comments at 18.

⁹⁶¹ PacTel reply at 21.

⁹⁰² ALTS comments, Attachment A at 20-21; LCI comments at 18; TCC reply at 17; see also CompTel comments at 34 (the Com-

competitors' ability to create new services. PacTel argues that it is not technically feasible to route local calls originating on unbundled loops onto particular outgoing trunks connected to that switch.

409. ALTS argues that incumbent LECs should be required to make local switching available so that all signaling information necessary to complete a call is passed to the connecting carrier, such as an IXC or a competing provider. The Wyoming Commission is considering adoption of a rule that would require incumbent LECs to pass on signaling information to interconnected carriers, and would also prohibit incumbent LECs from claiming a proprietary right to signaling protocols.

c. Discussion

(1) Local Switching Capability

410. We conclude that incumbent LECs must provide local switching as an unbundled network element. The record supports a finding that it is technically feasible for incumbent LECs to provide access to an unbundled local switching element, and that denying access to a local switching element would substantially impair the ability of many competing carriers to provide switched telecommunications services. We also note that section 271 re-

mission should enable requesting carriers to establish routing parameters for the following categories of traffic: domestic inter-LATA, presubscribed intraLATA, non-presubscribed intraLATA, 800/888, 900, interLATA operator traffic, intraLATA/0-/0+ operator traffic, and international direct dialed).

⁹⁰⁸ CompTel comments at 34.

⁹⁰⁴ PacTel reply at 20.

⁹⁰⁸ ALTS comments at 29 (claiming that some carriers strip certain signaling information and end offices and tandem offices, thereby undermining the ability of new entrants to receive and aggregate traffic for various IXCs).

ses Wyoming Commission comments at 24.

quires BOCs to offer or provide "[1]ocal switching unbundled from transport, local loop transmission, or other services" as a precondition to providing in-region inter-LATA services. As discussed below, we identify a local switching element that includes the basic function of connecting lines and trunks as well as vertical switching features, such as custom calling and CLASS features. We agree with the Illinois Commission that defining the switching element in this way will permit competitors to compete more effectively by designing new packages and pricing plans. 900

411. In the United States, there are over 23,000 central office switches, the vast majority of which are operated by incumbent LECs. 1 It is unlikely that consumers would receive the benefits of competition quickly if new entrants were required to replicate even a small percentage of incumbent LECs' existing switches prior to entering the market. The Illinois Commission staff presented evidence in a recent proceeding indicating that it takes between nine months and two years for a carrier to purchase and install a switch. We find this to be persuasive evi-

^{907 47} U.S.C. § 271(c) (2) (B) (vi).

⁹⁰⁸ Custom calling features, such as call waiting, three-way calling, and call forwarding, are switch-based calling functions. CLASS features, such as caller ID, are number translation services that are based on the availability of interoffice signaling.

⁹⁰⁵ AT&T Communications of Illinois, Petition for a Total Local Exchange Wholesale Service Tariff from Illinois Bell Telephone Company Pursuant to Section 13-505.5 of the Illinois Public Utilities Act, Order, Docket Nos. 95-0458 and 95-0531, June 26, 1996 (Illinois Wholesale Order) at 63-66.

⁹¹⁰ Statistics of Communications Common Carriers, Federal Communications Commission, 1994/1995 Edition, at Table 2.4. This figure is derived from carriers filing with the FCC, which represent approximately 92 percent of the industry.

⁹¹¹ Supplemental Rebuttal Testimony of Jake Jennings, Office of Policy and Planning, Illinois Commerce Commission, ICC Staff Ex. 1.04, Docket No. 95-0458, at 11-12 (Mar. 11, 1996).

dence of the entry barrier that would be created if new entrants were unable to obtain unbundled local switching from the incumbent LEC. The ability to purchase unbundled switching will also promote competition in an area until the new entrant has built up a sufficient customer base to justify investing in its own switch. We expect that the availability of unbundled local switching is likely to increase the number of carriers that will successfully enter the market, and thus should accelerate the development of local competition.

412. We define the local switching element to encompass line-side and trunk-side facilities plus the features, functions, and capabilities of the switch. The line-side facilities include the connection between a loop termination at, for example, a main distribution frame (MDF), and a switch line card. Trunk-side facilities include the connection between, for example, trunk termination at a trunk-side cross-connect panel and a trunk card. The features, functions, and capabilities of the local switch include the basic switching function of connecting lines to lines, lines to trunks, trunks to lines, trunks to trunks. It also includes the same basic capabilities that are available to the incumbent LEC's customers, such as a telephone number, directory listing, dial tone, signaling, and access to 911, operator services, and directory assist-

they had been developed by the Illinois and New York Commissions, respectively, to describe two possible approaches to establishing an unbundled local switching element. Parties commenting on the unbundled switching element attributed a variety of functionalities to each of these terms. To avoid confusion, we will not use these terms in discussing the unbundled local switching element. Instead, we will address commenters' proposals according to the functionality that they recommend be included in the definition of an unbundled local switching element.

⁹¹⁸ A line card is a plug-in electronic printed circuit card that operates ringing, holding, and other features associated with one or several telephone lines.

ance. In addition, the local switching element includes all vertical features that the switch is capable of providing, including custom calling, CLASS features, and Centrex, as well as any technically feasible customized routing functions. Thus, when a requesting carrier purchases the unbundled local switching element, it obtains all switching features in a single element on a per-line basis. A requesting carrier will deploy individual vertical features on its customers' lines by designating, via an electronic ordering interface, which features the incumbent LEC is to activate for particular customer lines.

413. We disagree with commenters who argue that vertical switching features should be classified exclusively as retail services, available to competing providers only through the resale provision of section 251(c)(4). The 1996 Act defines network element as "a facility or equipment used in the provision of a telecommunications service" and "the features, functions, and capabilities that are provided by means of such facility or equipment. 1018 Vertical switching features, such as call waiting, are provided through operation of hardware and software comprising the "facility" that is the switch, and thus are "features" and "functions" of the switch. 1019 We note that

⁹¹⁴ Purchasing the local switching element does not entitle a requesting carrier to connect its own AIN call processing database to the incumbent LEC's switch, either directly or via the incumbent LEC's signal transfer point or database. Section V.I.4, which discusses the unbundling of incumbent LECs' signaling systems and databases. We also note that E911 and operator services are further unbundled from local switching. See infra Section V.I.6.

⁹¹⁸ Section 251(c)(4)(A) requires incumbent LECs "to offer for resale at wholesale rates any telecommunications service that the carrier provides at retail to subscribers who are not telecommunications carriers." 47 U.S.C. § 251(c)(4)(A).

^{918 47} U.S.C. § 153(29).

⁹¹⁷ In some cases vertical features may be provided using hardware and software external to the actual switch. In those instances, the functionality of such external hardware and software is a sepa-

the Illinois Commission recently defined an unbundled local switching element to include vertical switching features. Although we find that vertical switching features should be available to competitors through the resale provision of section 251(c)(4), we reject the view that Congress intended for section 251(c)(4) implicitly to remove vertical switching features from the definition of "network element." Therefore, we find that vertical switching features are part of the unbundled local switching element.

414. At this time we decline to require further unbundling of the local switch into a basic switching element and independent vertical feature elements. Such unbundling does not appear to be necessary to promote local competition. Indeed, most potential local competitors do not recommend that vertical switching features be available as separate network elements. MCI, AT&T and LDDS believe that such features should be available to new entrants as part of the local switching element. 921 We also note that additional unbundling of the local switching would not result in a practical difference in the way the local switching element is provisioned. As discussed below, when a competing provider orders the unbundled basic switching element for a particular customer line, it will designate which vertical features should be activated by the incumbent LEC for that line. In addition, the

rate element under section 251(c)(3), and is available to competing providers. See infra Section V.I.4, discussing unbundled signaling and databases.

⁹¹⁸ Illinois Wholesale Order at 63-66.

⁹¹⁹ See supra Section V.H, rejecting arguments that services available for resale under section 251(c)(4) cannot be provided via unbundled elements.

⁹²⁵ See infra Section VII.C.2.b.2, concerning the pricing of an unbundled switching element,

⁹²¹ AT&T June 28 Ex Parte at 1-2; MCI comments at 31; LDDS comments at 44.

record indicates that the incremental costs associated with vertical switching features on a per-line basis may be quite small, 922 and may not justify the administrative difficulty for the incumbent LEC or the arbitrator to determine a price for each vertical element. Thus, states can investigate, in arbitration or other proceedings, whether vertical switching features should be made available as separate network elements. We will continue to review and revise our rules in this area as necessary.

- 415. We conclude that providing access to an unbundled local switching element at a LEC central office is technically feasible. We are not persuaded by the argument that shared use of an unbundled switching element would jeopardize network security and reliability by permitting competitors independently to activate and deactivate various switching features. A competing provider will purchase and obtain the local switching element the same way it obtains an unbundled local loop, that is, by ordering, via electronic interfaces, oca the local switching element and particular vertical switching features. 924 The incumbent LEC will receive the order and activate (or deactivate) the particular features on the customer line designated by the competing provider. Consequently, the incumbent LEC is not required to relinquish control over operations of the switch.
- 416. We also reject the argument that a definition of local switching that incorporates shared use of a local switch would involve physical partitioning of the switch. **28**

Affairs Director, AT&T, to Elliot Maxwell, FCC, June 25, 1996 (AT&T June 25 Ex Parte).

⁹²³ See infra Section V.I.4, infra, addressing requesting carriers' access to incumbent LECs' ordering and provisioning systems.

⁹²⁴ Section V.I.5 addresses the arrangements for ordering unbundled network elements.

⁹²⁵ U S West comments at 55-57.

The requirements we establish for local switch unbundling do not entail physical division of the switch, and consequently do not impose the inefficiency or technical difficulties identified by some commenters.

- 417. Nor are we persuaded by the arguments of some incumbent LECs that an unbundled switching element based on shared use of the local switch is technically infeasible because incumbent LECs lack significant excess capacity at any given time. Thus, at least initially, an increase in the use of the local switching element by the requesting carrier is not likely to lead to an enormous, immediate increase in switch use by the incumbent LEC. If incumbent LECs and competing providers believe that they would benefit by quantifying their anticipated demand for switch resources, they are free to do so in the negotiation and arbitration processes. Such planning may be necessary when a competitor anticipates that usage of the local switching element by its customers will place demands on the incumbent LEC's switch that exceed the usage levels anticipated by the incumbent LEC. 926
- 418. We conclude that customized routing, which permits requesting carriers to designate the particular outgoing trunks that will carry certain classes of traffic originating from the competing provider's customers, is technically feasible in many LEC switches. Customized routing will enable a competitor to direct particular classes of calls to particular outgoing trunks, which will permit a new entrant to self-provide, or select among other providers of, interoffice facilities, operator services, and directory assistance. Bell Atlantic notes that customized

⁹²⁶ Bell Atlantic, for example, notes that a competitor's service or pricing packages could stimulate greater switch usage than previously experienced by the incumbent. Letter from Patricia Koch, Assistant Vice President, Bell Atlantic, to William Caton, Acting Secretary, FCC, June 21, 1996 (Bell Atlantic June 21 Ex Parte).

⁹²⁷ See, e.g., AT&T June 28 Ex Parte. In addition, we note that the Illinois Commission recently directed Ameritech and Centel to

routing is generally technically feasible for local calling. although it notes that the technology and capacity constraints vary from switch to switch. SBC contends that customized routing is technically infeasible for older switches, such as the 1AESS switch. AT&T acknowledges that, although the ability to establish customized routing in 1AESS switches may be affected by the "call load" in each office, only 9.8% of the switches used by the seven RBOCs, GTE and SNET are 1AESS switches. 050 We recognize that the ability of an incumbent LEC to provide customized routing to a requesting carrier will depend on the capability of the particular switch in question. Thus, our requirement that incumbent LECs provide customized routing as part of the "functionality of the local switching element applies, by definition, only to those switches that are capable of performing customized routing. An incumbent LEC must prove to the state commission that customized routing in a particular switch is not technically feasible.

419. Section 251(d)(2)(A) requires the Commission, in determining which network elements should be made available to competing providers, to consider 'whether access to such network elements as are proprietary in na-

permit a carrier purchasing wholesale local exchange service to designate a provider of operator services and directory assistance other than that of the incumbent LEC. Such access is accomplished through the routing of such calls from the incumbent LEC's switch to the competing provider of the operator service or directory assistance. See Illinois Wholesale Order at 45.

Atlantic, to William Caton, Acting Secretary, FCC, June 24, 1996 (Bell Atlantic June 24 Ex Parte); see also BellSouth comments at 41-42 n.89 (the ability to provide customized routing depends on the quantity of customized routing requests from other competitors).

⁹²⁹ SBC comments at 41-42.

⁹³⁰ Letter from Bruce Cox, Government Affairs Director, AT&T, to William F. Caton, Secretary, FCC, July 11, 1996 (AT&T July 11 Ex Parte).

ture is necessary." 981 To withhold a proposed network element from a competing provider, an incumbent LEC must demonstrate that the element is proprietary and that gaining access to that element is not necessary because the competing provider can use other, nonproprietary elements in the incumbent LEC's network to provide service. 482 U S West asserts that switch unbundling could raise concerns involving, among other things, "licensing of intellectual property." It cites a request by one interconnector to be the exclusive provider of particular features in U S West's generic switching software. 988 Bell Atlantic states that it is not at liberty to sub-license the software that operates vertical switching features. 984 We note, however, that these incumbent LECs do not object to providing vertical switching functionalities to requesting carriers under the resale provision of section 251(c)(4).038 In addition, the vast majority of parties that discuss unbundled local switching do not raise proprietary concerns with the unbundling of either basic local switching or vertical switching features. Even if we accept the claim of U S West and Bell Atlantic that vertical features are proprietary in nature, these carriers do not meet the second consideration in our section 251(d)(2)(A) standard, which requires an incumbent LEC to show that a new entrant could offer the proposed telecommunications service through the use of other, nonproprietary elements in the incumbent LEC's network. 636 Accordingly, we find that access to unbundled local switching is clearly "necessary" under our interpretation of section 251(d)(2)(A). QUAT

^{981 47} U.S.C. § 251(d) (2) (A).

⁹⁸² See supra Section V.E.

⁹³⁸ U S West comments at 55 n.117.

⁹³⁴ Bell Atlantic comments, Albers Attachment at 17-18.

West reply at 26-27; Bell Atlantic comments at 26.

⁹³⁶ See supra Section V.E.

⁹⁸⁷ Id.

- 420. Section 251(d)(2)(B) directs the Commission to consider whether the failure to provide access to an unbundled element "would impair the ability of the telecommunications carrier seeking access to provide the services that it seeks to offer." 938 We have interpreted the term "impair" to mean either increased cost or decreased service quality that would result from using network elements of the incumbent LEC other than the one sought. SBC and MFS contend that access to unbundled local switching may not be essential for new entrants because competitors are likely to deploy their own switches. 940 These parties present no evidence that competitors could provide service using another element in the LEC's network at the same cost and at the same level of quality. In addition, most commenters that address this issue generally argue that local switching is essential for the provision of competing local service, oal and we agree. We thus conclude that a requesting carrier's ability to offer local exchange services would be impaired, if not thwarted, without access to an unbundled local switching element.
- 421. Section 251(c)(3) requires that incumbent LECs provide access to unbundled network elements on terms and conditions that are "just, reasonable, and nondiscriminatory." We agree with CompTel and LDDS that new entrants will be disadvantaged if customer switchover is not rapid and transparent. We also note that the Michigan Commission has recognized the significance of customer switchover intervals and has directed Ameritech and GTE to file proposals on how they will "ensure the

^{938 47} U.S.C. § 251(d)(2)(B).

⁹³⁹ See supra Section V.E.

⁹⁴⁰ SBC reply at 23; MFS comments at 46.

⁹⁴¹ See, e.g., LDDS reply at 18 (unbundled local switching is "critical" to local competition); TIA comments at 18; AT&T Mar. 21 Letter at 17-18.

^{942 47} U.S.C. § 251(c) (3).

equal availability of expeditious processing of local, inter-LATA, and intraLATA carrier changes." 943 Therefore, we require incumbent LECs to switch over customers for local service in the same interval as LECs currently switch end users between interexchange carriers. This requirement applies to switchovers that only require the incumbent LEC to make changes to software. Switchovers that require the incumbent LEC to make physical modifications to its network, such as connecting a competitor's loop to its switch, are not subject to this requirement, and instead are governed by our terms and conditions for all unbundled elements. 44 Today, incumbent LECs routinely change customers' presubscribed interexchange carriers quickly and transparently, thereby contributing to the competitiveness of the interexchange market. We expect that a similar requirement for local exchange switchovers that require only a software change will similarly contribute to local exchange competition.

422. We reject the proposal by some incumbent LECs to define unbundled local switching as the facilities that provide a point of access to the switch, but that would not actually include switching functionality. Under this definition, the purchaser of the local switching element would not actually obtain local switching, only the right to purchase local switching functionality and other switching features at wholesale rates. We believe that the unbundled local switching element must include the functionality of connecting lines and trunks. The definition proposed by these incumbent LECs would contravene the requirement in section 251(c)(3) that incumbent LECs provide network elements "in a manner that allows requesting

Permanent Interconnection Arrangements Between Basic Local Exchange Service Providers, Opinion and Order, Mich. Pub. Serv. Comm'n, Case No. U-10860, at 36-37 (June 5, 1996).

⁹⁴⁴ See supra Section V.G., discussing provisioning intervals for unbundled network elements.

carriers to combine such elements in order to provide such telecommunications service." ⁹⁴⁵ If a competing provider combined its own loops and transport with the local switching element ("point of access"), it would be unable to provide telecommunications service without separately purchasing, at wholesale rates, switching functionality from the incumbent LEC.

- 423. We also disagree with the proposal to define local switching as a point of access plus basic switching functionality, but that would exclude vertical switching features. 446 As a legal matter, this definition is inconsistent with the 1996 Act's definition of "network element," which includes all the "features, functionalities, and capabilities provided by means of such facility or equipment." out In addition, this definition would not fulfill the pro-competitive objectives of the 1996 Act as effectively as the per-line definition we adopt. A competitor that obtains basic and vertical switching features at cost-based rates will have maximum flexibility to distinguish its offerings from those of the incumbent LEC by developing a variety of service packages and pricing plans. Moreover, an upfront purchase of all local switching features may speed entry by simplifying practical issues such as the pricing of individual switching features.
- 424. We also address the impact on small incumbent LECs. For example, the Illinois Independent Telephone Association and the Rural Telephone Coalition favor rules that recognize the differences between larger and smaller LECs. We have considered the economic impact of

^{945 47} U.S.C. § 251(c)(3).

⁹⁴⁶ Sprint comments at 34; USTA reply at 16-17; SBC reply at 20; NYNEX reply at 31; MECA comments at 29.

^{947 47} U.S.C. § 153(29); see supra section V.C., which interprets the Act's definition of "network element."

⁹⁴⁸ See, e.g., LDDS comments at 33; AT&T comments at 21.

⁹⁴⁹ Illinois Ind. Tel. Ass'n comments at 1; Rural Tel. Coalition reply at 37.

our rules in this section on small incumbent LECs. In this section, for example, we expressly provide for the fact that certain LECs may possess switches that are incapable of performing customized routing for competitors that purchase unbundled local switching. As noted by Rural Telephone Coalition and the Illinois Independent Telephone Coalition, this approach is necessary to accommodate the different technical capabilities of large and small carriers. We also note that section 251(f) of the 1996 Act provides relief for certain small LECs from our regulations under section 251.

(2) Tandem Switching Capability

425. We also affirm our tentative conclusion in the NPRM that it is technically feasible for incumbent LECs to provide access to their tandem switches unbundled from interoffice transmission facilities. We note that some states already have required incumbent LECs to unbundle tandem switching. Parties do not contend, pursuant to section 251(d)(2)(A), that tandem switches are proprietary in nature. With regard to section 251(d)(2)(B), we find that competitors' ability to provide telecommunications service would be impaired without unbundled access to tandem switching. Therefore, we find that the availability of unbundled tandem switching will ensure that competitors can deploy their own interoffice facilities and connect them to incumbent LECs' tandem switches where it is efficient to do so.

c. Discussion

439. We conclude that incumbent LECs must provide interoffice transmission facilities on an unbundled basis to requesting carriers. The record supports our conclusion

⁹⁵⁰ See, e.g., Ameritech comments at 43, Cincinnati Bell comments at 18, GTE comments at 38, AT&T March 21 Letter at 23.

that such access is technically feasible and would promote competition in the local exchange market. We note that the 1996 Act requires BOCs to unbundle transport facilities prior to entering the in-region, interLATA market. 986

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- 441. The ability of new entrants to purchase the interoffice facilities we have identified will increase the speed with which competitors enter the market. By unbundling various dedicated and shared interoffice facilities, a new entrant can purchase all interoffice facilities on an unbundled basis as part of a competing local network, or it can combine its own interoffice facilities with those of the incumbent LEC. The opportunity to purchase unbundled interoffice facilities will decrease the cost of entry compared to the much higher cost that would be incurred by an entrant that had to construct all of its own facilities. An efficient new entrant might not be able to compete if it were required to build interoffice facilities where it would be more efficient to use the incumbent LEC's facilities. We recognize that there are alternative suppliers of interoffice facilities in certain areas. We are convinced, however, that entry will be facilitated if competitors have greater, not fewer, options for procuring interoffice facilities as part of their local networks, and that Congress intended for competitors to have those options available from competitors. Thus, the rules we establish for the unbundled interoffice facilities should maximize a competitor's flexibility to use new technologies in combination with existing LEC facilities.
- 442. We find that it is technically feasible for incumbent LECs to unbundle the foregoing interoffice facilities as individual network elements. The interconnection and unbundling arrangements among the larger LECs, IXCs, and CAPs that resulted from our Expanded Interconnec-

^{986 47} U.S.C. § 271(c)(2)(B)(v).

tion rules confirm the technical feasibility of unbundling interoffice facilities used by incumbent LECs to provide special access and switched transport. As AT&T and Telecommunications Resellers Association point out, IXCs currently interconnect with incumbent LECs' transport facilities pursuant to standard specifications. We also note that commenters do not identify technical feasibility problems with unbundling interoffice facilities.

* * * *

482. Under section 251(d)(2)(B), the Commission must consider whether "the failure to provide access to such network elements would impair the ability of the telecommunications carrier seeking access to provide the services that it seeks to offer." 1122 Access to signaling systems continues to be a critical element to providing competing local exchange and exchange access service. The vast majority of calls made over incumbent LEC networks are set-up and controlled by separate signaling networks. Incumbent LECs argue that access to signaling systems and associated databases is already available from other providers and therefore, they should not have to unbundle them for access by competitors. 1123 As discussed above, section 251(d)(2)(B) only relieves an incumbent LEC of its unbundling obligation if other unbundled elements in its network could provide the same service without diminution of quality. Because alternative signaling methods, such as in-band signaling, would provide a lower quality of service, 1124 we conclude that a competitor's ability

⁹⁸⁸ See, e.g., MCI comments at 32; NCTA comments at 42; GST comments at 24; TIA comments at 13; MFS comments at 47-48.

⁹⁸⁹ AT&T comments at 22; Telecommunications Resellers Ass'n comments at 35.

^{1122 47} U.S.C. § 251(d)(2)(B).

¹¹²³ See, e.g., Bell Atlantic comments at 27-28; BellSouth comments at 44; GTE comments at 40-41; NYNEX comments at 71.

¹¹²⁴ SS7 network signaling is critical in the provision of modern telecommunications services, allowing signaling messages to travel

to provide service would be significantly impaired if it did not have access to incumbent LECs' unbundled signaling links and STPs.

483. The purchase of unbundled elements of the SS7 network gives the competitive provider the right to use those elements for signaling between its switches (including unbundled switching elements), between its switches and the incumbent LEC's switches, and between its switches and those third party networks with which the incumbent LEC's SS7 network is interconnected. When a competitive provider purchases unbundled switching from the incumbent LEC, the incumbent LEC must provide nondiscriminatory access to its SS7 network from that switch in the same manner in which it obtains such access itself. Carriers that provide their own switching facilities should be able to access the incumbent LEC's SS7 network for each of their switches via a signaling link between their switch and an incumbent LEC's STP. 1128 Competitive carriers should be able to make this connection in the same manner as an incumbent LEC connects one of its own switches to the STP. This could be accomplished by the incumbent providing an unbundled signal-

separately from the voice path for individual calls, increasing efficiency and making possible a host of new signaling-based services. AT&T comments at 23. Popular features like Calling Number Identification (Caller ID) and Calling Name Identification, as well as enhanced call set-up functions and such Custom Calling features as Repeat Call and Return Call, would be unavailable without SS7 capabilities. Bell Atlantic comments at Attachment 3, 17.

to the incumbent LEC's signaling system in any technically feasible manner. Competitors may bring a signaling "A" link from their switch to the incumbent LEC's STP. CAPs use this type of connection today to connect their tandem switches to incumbent LECs' STPs. AT&T comments at 24 n.26. Competitors might also link their switch to their own STP, and then connect to an incumbent LEC's STP via a signaling "D" or "B" link.

ing link from its STP to the competitor's switch or by a competitor bringing a signaling link from its switch to the incumbent LEC's STP.

(2) Call-Related Databases

484. We conclude that incumbent LECs, upon request, must provide nondiscriminatory access on an unbundled basis to their call-related databases ¹¹²⁶ for the purpose of switch query and database response through the SS7 network. ¹¹²⁷ Thus, for example, we find that it is technically feasible for incumbent LECs to provide access to the Line Information Database (LIDB), the Toll Free Calling Database and Number Portability downstream databases. ¹¹²⁸ The vast majority of parties, including incumbent LECs, agree that it is technically feasible to provide access to the LIDB and the Toll Free Calling databases at an STP

and collection or used in the transmission, routing, or other provision of a telecommunications service.

¹¹²⁷ Query and response access to a call-related database is intended to require the incumbent LEC only to provide access to its call-related databases as is necessary to permit a competing provider's switch (including the use of unbundled switching) to access the call-related database functions supported by that database. The incumbent LEC may mediate or restrict access to that necessary for the competing provider to provide such services as are supported by the database.

standard TCAP messages have been established, and reliability, security, provisioning, and billing issues have been addressed. Letter from Karen Weis, Division Manager, AT&T to William Caton, Acting Secretary, FCC, July 16, 1996 (AT&T July 16 Ex Parte). Bell Atlantic states that it currently provides interconnection for LIDB and 800 databases. Bell Atlantic comments at 2. Number portability "downstream databases" are defined in Part 51 of our rules as adopted by this Order. See In the Matter of Telephone Number Portability, First Report and Order and Further Notice of Proposed Rulemaking, CC Docket No. 95-116, FCC 96-286 (rel. July 2, 1996).

linked to the database. Several state commissions also report that they have ordered incumbent LECs' to provide such access to the LIDB and the Toll Free Calling databases. We require incumbent LECs to provide this access to their call-related databases by means of physical access at the STP linked to the unbundled database. We find that such access is critical to entry in the local exchange market.

486. Several commenters also identified access to callrelated databases used in the incumbent's AIN to be critical to fair competition in the local market, 1123 and some
state commissions have ordered incumbent LECs to provide access to AIN databases. 1134 We conclude that such
access is technically feasible via an STP for those callrelated databases used in the incumbent LEC's AIN. 1135
First, of course, when a new entrant purchases an incumbent's local switching element it is technically feasible for
the new entrant to use the incumbent's SCP element in
the same manner, and via the same signaling links, as the
incumbent itself. Thus, we find no technical impediments
in the record with regard to such access when a requesting

ALTS comments at 31; GTE comments at 40; MCI comments at 34-35; NYNEX comments at 71; US West comments at 48.

¹¹³⁰ Louisiana Commission comments at 5; Michigan Commission comments at 12; PacTel comments at Appendix A, 7 (California Commission has required such access).

¹¹⁸³ Cable & Wireless comments at 24; Citizens Utilities comments at 15; MCI comments at 32-33; TIA comments at 14; CompTel comments at 43; AT&T comments at 23-26.

¹¹³⁴ Louisiana Commission comments at 5; Wyoming Commission comments at 23-24; see also Illinois Wholesale Order.

comments at 23-26; CompTel comments at 43; MCI comments at 36; Letter from Wendy Blueming, Regulatory Affairs and Public Policy, SNET to William Caton, Acting Secretary, FCC, July 23, 1996 (SNET July 23 Ex Parte); AT&T July 16 Ex Parte.

carrier is also purchasing a local switching element associated with the AIN call-related database.

487. Further, we conclude that when a new entrant deploys its own switch, and links it to the incumbent LEC's signaling system, it is technically feasible for the incumbent to provide access to the incumbent's SCP to provide AIN-supported services to customers served by the new entrant's switch. Some SS7 network services resellers currently provide such access. 1136 Other potential local competitors present additional evidence supporting the technical feasibility of such access.1187 Unlike the situation where a competitor's SCP would control the incumbent's switch (which is discussed below in section V.I.4.c.(4)). in this scenario, the incumbent's SCP will respond to and control the competitor's switch, and potential competitors that have commented in the record do not express network reliability concerns with regard to such control. 1188 Further, like the software resident in a switch, the incumbent LEC's applications resident in an SCP are merely part of the overall software and hardware making up the SCP facility. Thus, carriers purchasing access under either scenario above may use the incumbent's service applications in addition to their own. 1180

488. Although we conclude that access to incumbent AIN SCPs is technically feasible, we agree with BellSouth

¹¹⁸⁶ SNET July 23 Ex Parte; Letter from Stephen Kraskin, Illuminet (USTN) to Office of the Secretary, FCC July 23, 1996 (USTN July 23 Ex Parte).

¹¹³⁷ See AT&T July 16 Ex Parte; see also AT&T comments at 23-26; CompTel comments at 43; MCI comments at 36.

¹¹³⁸ See AT&T July 16 Ex Parte. AT&T asserts that no additional or unique reliability problems would be created that have not already been addressed and resolved by those incumbent LECs who have proposed SMS access for third parties in the Intelligent Networks proceeding. Id.

¹¹³⁹ See infra, Section V.I.4.c.(3) on unbundled access to the incumbent LEC's SCE and SMS.

that such access may present the need for mediation mechanisms to, among other things, protect data in incumbent AIN SCPs and ensure against excessive traffic volumes. In addition, there may be mediation issues a competing carrier will need to address before requesting such access. Accordingly, if parties are unable to agree to appropriate mediation mechanisms through negotiations, we conclude that during arbitration of such issues the states (or the Commission acting pursuant to section 252(a)(5)) must consider whether such mediation mechanisms will be available and will adequately protect against intentional or unintentional misuse of the incumbent's AIN

¹¹⁴⁰ Letter from W.W. Jordan, Executive Director-Federal Regulatory, BellSouth to William Caton, Acting Secretary, FCC, July 16, 1996 (BellSouth July 16 Ex Parte) ("With a BellSouth SCP to a ALEC SSP [switch] interconnection arrangement, network reliability and security concerns, from BellSouth's perspective, would largely be limited to issues associated with traffic management."); Letter from James Smith, Director-Federal Relations, Ameritech to William Caton, Acting Secretary, FCC, July 17, 1996 (Ameritech July 17 Ex Parte) ("The volume of queries sent from the CLEC SSP [switch] could overload the LEC SCP, interfering with the operation of the service provided to that CLEC, or with other services which may operate on the LEC's SCP."); Letter from Joseph Mulieri, Director-FCC Relations, Bell Atlantic to Robert S. Tanner, Attorney Advisor, FCC, July 18, 1996 (Bell Atlantic July 18 Ex Parte). BellSouth also raises the need for mediation to prevent unauthorized modification of information within an incumbent LEC's AIN SCP database. BellSouth July 16 Ex Parte. Incumbent LEC's comments in this proceeding and in the IN docket generally focus on the need for mediation to prevent a competitor's database from sending inappropriate AIN signaling information to the incumbent LEC's switch (see infra Section V.I.4.c.(4)). See PacTel comments at 61-62; BellSouth comments at 45-46; Bell Atlantic comments at Appendix 3, 18-19; U S West comments in CC Docket No. 91-346 at 73-74, 84; NYNEX comments in CC Docket No. 91-346 at 14-15; SBC comments in CC Docket No. 91-346 at 8-9.

¹¹⁴¹ Mediation may be necessary for requesting carriers to ensure that inadvertent feature interactions, network management control and customer privacy concerns do not arise from such access. See e.g., Ameritech July 17 Ex Parte.

facilities. We encourage incumbent LECs and competitive carriers to participate in industry fora and industry testing to resolve outstanding mediation concerns. Incumbent LECs may establish reasonable certification and testing programs for carriers proposing to access AIN call related databases in a manner similar to those used for SS7 certification. Incumber 1348

489. We recognize that providing unbundled access to AIN call-related databases at cost, and in particular providing access to the incumbent LEC's software applications that reside in the AIN databases, may reduce the incumbent's incentive to develop new and advanced services using AIN. In the near term, however, requiring entrants to bear the cost of deploying a fully redundant network architecture, including AIN databases and their application software, would constitute a significant barrier to market entry for competitive carriers. As local service markets develop, however, competition may reduce the incumbent LEC's control over bottleneck facilities and increase the importance of innovation. In those circumstances it is important that incumbent LECs have the incentive to develop unique and innovative services supported by AIN. Therefore at a later date, we will revisit the proper balance between providing unbundled access and maintaining the incentives of incumbent LECs to innovate.

490. Parties generally do not identify proprietary concerns when access to call-related databases is provided via STPs. In general, signaling protocols used to access call-related databases adhere to open Bellcore standards.

¹¹⁴² See, e.g., Christine Maglott, Information Industry Liaison Committee Wrestles with Mediation Issues, ATIS News, 3 Vol. 11, No.3, May-June, 1996.

network and gather information from its SCP must be certified and enter into contractual agreements for information access and proper billing. SBC comments at 47-48.

Parties also do not raise proprietary concerns with specific call-related databases themselves. Today, many separate carriers access incumbent LEC Toll Free Calling and LIDB databases for the proper routing and billing of calls. Thus, we conclude that, in general, unbundled access to call-related databases does not present proprietary concerns with respect to section 251(d)(2)(A). Incumbent LECs may, however, present such proprietary concerns in the arbitration process with regard to specific databases, and states (or the Commission acting pursuant to section 252(e)(5)) may take action to limit unnecessary access to proprietary information.

491. We also conclude that denying access to callrelated databases would impair the ability of a competing provider to offer services such as Alternative Billing Services and AIN-based services. AIN-based services represent the cutting edge of telephone exchange services, and competitors would be at a significant disadvantage if they were forced to develop their own AIN capability immediately. In addition, the record indicates that deployment of callrelated databases in the near term would represent a substantial cost to new entrants. As mentioned above, incumbent LECs argue that access to certain call-related databases is already competitively available and therefore they should not have to unbundle access to them. 1148 As discussed above, however, section 251(d)(2)(B) would only relieve an incumbent LEC of its unbundling obligation if other unbundled elements in its network could provide the same service without diminution of quality. Because of the absence of such elements, we conclude that a competitor's ability to provide service would be significantly impaired if it did not have unbundled access to incumbent LECs' call-related databases, including the LIDB, Toll

¹¹⁴⁴ See AT&T July 16 Ex Parte.

¹¹⁴⁶ We note that competitive provision of AIN SCP database services is not evidenced in the record.

Free Calling, and AIN databases for the purpose of switch query and database response through the SS7 network.

492. We also conclude that access to call-related databases as discussed above, and access to the service management system discussed below, must be provided to, and obtained by, requesting carriers in a manner that complies with section 222 of the Act. Section 222, which was effective upon adoption, sets out requirements for privacy of customer information. Section 222(a) provides that all telecommunications carriers have a duty to protect the confidentiality of proprietary information of other carriers, including resellers, equipment manufacturers, and customers. Section 222(b) requires that telecommunications carriers that use proprietary information obtained from another telecommunications carrier in providing any telecommunications service "shall use that information only for such purpose, and shall not use such information for its own marketing purposes." 1146 Section 222(c) and (d) provide protection for, and limitations on the use of, and access to, customer proprietary network information (CPNI).1147 We note that we have initiated a proceeding to clarify the obligations of carriers with regard to section 222(c) and (d).1148

(3) Service Management Systems

493. Finally, we conclude that incumbent LECs should provide access, on an unbundled basis, to the service man-

^{1146 47} U.S.C. § 222(b).

¹¹⁴⁷ Section 222(f)(1) defines CPNI as "information that relates to the quantity, technical configuration, type, destination, and amount of use of a telecommunications service subscribed to by any customer of a telecommunications carrier, and that is made available to the carrier by the customer solely by virtue of the carrier-customer relationship." 47 U.S.C. § 222(f)(1)(A).

¹¹⁴⁸ See Implementation of the Telecommunications Act of 1996: Telecommunications Carriers' Use of Customer Proprietary Network Information and other Customer Information, Notice of Proposed Rulemaking, CC Docket No. 96-115, FCC 96-221 (rel. May 17, 1996).

agement systems (SMS), which allow competitors to create, modify, or update information in call-related databases. We believe it is technically feasible for incumbent LECs to provide access to the SMS in the same manner and method that they provide for their own access. We find that such access is necessary for competitors to effectively use call-related databases, which we have already found to be critical to entry in the local exchange market.

494. Commenters argue that they need equal access to incumbent LECs' SMSs to write or populate their own information in call-related databases. 1140 As discussed above, information bound for many call-related databases is entered first at an off-line SMS, which then downloads the information to the call-related database for real time use on the network. We find that competing provider access to the SMS is technically feasible if it is provided in the same or equivalent manner that the incumbent LEC currently uses to provide such access to itself.1350 For example, if the incumbent LEC inputs information into the SMS using magnetic tapes, the competitive carrier must be able to create and submit magnetic tapes for the incumbent to input into the SMS in the same way the incumbent inputs its own magnetic tapes. If the incumbent accesses the SMS through an electronic interface, the competitive carrier should be able to access the SMS through an equivalent electronic interface. 1151 We further conclude that, whatever method is used, the incumbent LEC must provide the competing carrier with the information necessary

¹¹⁴⁹ AT&T comments at 26; MCI comments at 34-35.

^{11,50} Many carriers currently submit such information to incumbent LECs or third party SMSs. USTN reply at 1-4; Bell Atlantic comments at Attachment 3, 16; GTE comments at 40-41 n.61.

¹¹⁵¹ For example, access to the AIN SMS is accomplished through the SCE, which is a computer environment for the design and test of AIN based services.

to correctly enter or format for entry the information relevant for input into the particular incumbent LEC SMS.

495. Specifically with respect to AIN, we find that the record in the Intelligent Networks proceeding supports access to the SMS. 1152 A competing carrier seeking access to the SMS that is part of the incumbent LEC's AIN would do so through the incumbent LEC's service creation environment (SCE), an interface used to design, create, and test AIN supported services. Software successfully tested in the SCE is transferred to the SMS, where it is then downloaded into an SCP database for active deployment on the network. We are persuaded that the risk of harm to the public switched network from such access to the SMS is minimized by the technical safeguards inherent in the SCE and SMS. As described in comments filed in the Intelligent Networks docket, competitors accessing the SCE and SMS would not communicate directly with the LEC's database or switch. 1153 We therefore conclude that

¹¹⁵² See Intelligent Networks, Notice of Proposed Rulemaking, 8 FCC Rcd 6813 (1993). In the Intelligent Networks proceeding, most incumbent LECs supported SMS access. See GTE comments in CC Docket No. 91-346 at 21; United and Central comments in CC Docket No. 91-346 at 12; SNET comments in CC Docket No. 91-346 at 5; NYNEX comments in CC Docket No. 91-346 at 3 n.3, 10-11; BellSouth update comments in CC Docket No. 91-346 at 6; Bell Atlantic comments in CC Docket No. 91-346 at 6. Other parties, including potential competitors and manufacturers, also supported SMS access. See Siemens comments in CC Docket No. 91-346 at 2; TIA comments in CC Docket No. 91-346 at 2; MCI comments in CC Docket No. 91-346 at 10; Ericsson reply in CC Docket No. 91-346 at 2-3. Many commenters asserted that SMS access through the SCE would provide a valuable opportunity for third parties to create services. See GSA comments in CC Docket No. 91-346 at 3; SNET comments in CC Docket No. 91-346 at 2; Siemens comments in CC Docket No. 91-346 at 2; Ericsson reply in CC Docket No. 91-346 at 2-3; TIA comments in CC Docket No. 91-346 at 2; MCI comments in CC Docket No. 91-346 at 10.

¹¹⁵³ In their comments, BellSouth and Bell Atlantic describe the way they provide or plan to provide access to the SMS for third

such access is technically feasible, and that incumbent LECs should provide requesting carriers with the same access to design, create, test, and deploy AIN-based services at the SMS that the incumbent LEC provides for itself.¹¹⁵⁴ While many incumbent LECs express concerns with the technical feasibility of access to AIN, we conclude that those concerns deal primarily with the interconnection of third party AIN SCP databases to the incumbent LEC's AIN and not access to the SCE and SMS.¹¹⁵⁵

parties. Bell Atlantic proposes to first develop and deploy AIN services based on customer request and then subsequently to allow third parties themselves to create AIN services at a terminal either in a Bell Atlantic office or a third party office. Bell Atlantic comments in CC Docket No. 91-346 at 6. BellSouth proposes to permit third parties to use the service logic resident on BellSouth's service creation environment to create AIN services. BellSouth update reply in CC Docket No. 91-346 at 10.

access to competing carriers that will allow them to develop call processing applications pursuant to the same parameters the incumbent LEC uses itself, such as the time-of-day and origination of call parameters. BellSouth's recently proposed service to provide access to its SCE and SMS appears to be an example of the type of access to the SMS that incumbent LECs must provide to competitors upon request. Pleading Cycle Established for Comments on BellSouth Telecommunications, Inc's Petition for Expedited Waiver of Part 69 Rules, Public Notice, DA 96-27 (Jan. 17, 1996) (BellSouth Part 69 Waiver Petition).

the Intelligent Networks NPRM, LEC commenters generally agree that SMS access poses the least risk of harm to the public switched telephone network. See Bell Atlantic comments in CC Docket No. 91-346 at 6-7; BellSouth comments in CC Docket No. 91-346 at 12, 13; GTE comments in CC Docket No. 91-346 at 19, 21; NYNEX comments in CC Docket No. 91-346 at 3; PacTel comments in CC Docket No. 91-346 at 3; PacTel comments in CC Docket No. 91-346 at 5, 8; U S West comments in CC Docket No. 91-346 at 52; United and Central comments in CC Docket No. 91-346 at 1. Competitors also support such access. See MCI Comments at 6; Siemens Comments at 2; TIA Comments at 2.

496. We recognize that, although technically feasible, providing nondiscriminatory access to the SMS and SCE for the creation and deployment of AIN services may require some modifications, including appropriate mediation, to accommodate such access by requesting carriers. We note that Bell South is currently prepared to tariff and offer such access to third parties, and other incumbent LECs, including Bell Atlantic and Ameritech, indicate that they have made significant progress towards implementing such access.1156 Therefore, if parties are unable to agree to appropriate mediation mechanisms through negotiations, we conclude that during arbitration of such issues the states (or the Commission acting pursuant to section 252(e)(5)) must consider whether such mediation mechanisms will be available and will adequately protect against intentional or unintentional misuses of the incumbent's AIN facilities. We again encourage incumbent LECs and competitive carriers to participate in industry fora and industry testing to resolve outstanding mediation concerns.

497. Parties did identify some proprietary concerns regarding access to the SCE and SMS used in the incumbent LEC's AIN. Some incumbent LECs contend that the interface used at the SCE is proprietary in nature. 1157 GVNW argues that specific AIN-based services designed

¹¹⁵⁶ BellSouth Part 69 Waiver Petition. BellSouth proposes to tariff services that permit third parties to create and administer AIN services through access to the SCE and SMS. Bell South's SCE/SMS service will support third-party service development with the following AIN triggers: off-hook immediate, off-hook delay, public office dialing plan, customized dialing plan, feature code and terminating attempt triggers. Id. See Bell Atlantic comments in CC Docket No. 91-346 at 6, 8; Ameritech July 17 Ex Parte.

¹¹⁵⁷ U S West comments at 58 n.124 (for example, BellSouth uses DESIGNedge for such access which utilizes a proprietary database technology tailored to its network); Bell Atlantic comments at 28-29.

by carriers should be proprietary in nature. Competitors correctly argue that AIN can be used, not only for telecommunication services traditionally supported by the switch, but as a means to deploy advanced services not otherwise possible. We find that competing providers without access to AIN would be at a significant disadvantage to incumbent LECs, because they could not necessarily offer the same services to the customer. This access will help competing providers without imposing costs on incumbent LECs because the entrants will pay the cost. We therefore conclude, under section 251(d)(2)(A), that access to AIN, including those elements that may be proprietary, is necessary for successful entry into the local service market.

- 498. Most parties generally did not identify proprietary concerns with access to those SMSs used other than for AIN. Some parties, however, argue that there are proprietary interfaces used to enter information into various databases. Competing carriers counter that competitive providers would not need to have direct access to the proprietary methods of data entry used by incumbent LECs, and as a result we conclude that the unbundled access to SMSs used for other than AIN does not present proprietary concerns with respect to section 251(d)(2)(A). 1162
- 499. We also conclude that unbundled access to all SMSs is necessary for a competing provider to effectively use unbundled call-related databases. We find that the

¹¹⁵⁸ GVNW comments at 30 (incumbent LECs should be able to copyright AIN based services that they create or incumbents will have much less incentive to develop such services).

¹¹⁵⁹ AT&T comments at 23-25; Cable & Wireless comments at 24; MCI comments at 18, 33.

¹¹⁶⁰ See supra, Section VII.

¹¹⁶¹ AT&T June 13 Ex Parte.

¹¹⁶² AT&T comments at 26.

inability of competing carriers to use the SMS in the same manner that an incumbent LEC uses to input data itself would impair the ability of a competing carrier to effecfively offer services to its customers using unbundled callrelated databases. Commenters in the record point out that access to call-related databases alone would not allow the competing carrier to provide such services to its customers without access to an SMS.1163 We also conclude that AIN-based services are important to a new entrant's ability to compete effectively for customers with the incumbent LEC, and in developing new business by introducing new AIN based services. Thus we conclude that a competitor's ability to provide service would be significantly impaired if it did not have unbundled access to an incumbent LEC's SMS, including access to the SMS(s) used to input data to the LIDB, Toll Free Calling, Number Portability and AIN call-related databases.

500. We reject the contention by several incumbent LECs that signaling and database access was meant by the 1996 Act to apply only to such access as is necessary for call routing and completion. Although the competitive checklist for BOC entry into in-region interLATA services under section 271 requires "nondiscriminatory access to databases and associated signaling necessary for call routing and completion" 1164 the definition of a network element is more comprehensive in scope. A network element as defined by the 1996 Act includes "databases" and in particular "databases sufficient for billing and collection or used in the transmission, routing, or other provision of a telecommunications service." 1165 We find that the inclusion of "other provision of a telecommunications service" meant Congress intended the unbundling of databases to be read broadly and could include databases beyond

¹¹⁶³ Ericsson comments at 6.

^{1164 47} U.S.C. § 271(c)(2)(B)(x).

^{1165 47} U.S.C. § 153(29).

those directly used in the transmission or routing of a telecommunications service.

. . . .

operations support systems do not qualify as network elements under the 1996 Act. Ameritech argues that competitors have not demonstrated that they need access to such systems in order to provide telecommunications services. Several incumbent LECs assert that an incumbent LEC may negotiate with a competitor to provide such support services, but that the 1996 Act does not require them to unbundle these systems as network elements. Other parties argue that such access is not currently technically feasible and should be resolved through the negotiations process. SBC contends that its provisioning processes are neutral with respect to competing providers of service and that provisioning for competitors

¹¹⁸² BellSouth comments at 45; GTE comments at 44; U S West comments at 48; Lincoln Tel. reply at 12-14; Ameritech reply at 19-20 (only for routing, terminating, billing or providing telecommunications service); Bell Atlantic reply at 12-23 n.15 (not necessary to offer service and numerous resellers have operated in Bell Atlantic territory without such direct access); BellSouth reply at 24, n.45; GTE reply at 23; NYNEX reply at 33-34; PacTel reply at 22 (operations support systems not used in the provision of a telecommunications service). Letter from Michael Glover, General Attorney, Bell Atlantic, to William Kennard, General Counsel, FCC, April 15, 1996 (Bell Atlantic April 15 Ex Parte).

¹¹⁸³ Ameritech comments at 19-20; NYNEX comments at 33-34 (administrative databases are not used in routing or completion of calls); Bell Atalntic reply at 14; U S West reply at 27.

¹¹⁸⁴ NYNEX comments at 33-34; Ameritech reply at 19-20; Lincoln Tel. reply at 14 (competitors must provide their own ordering systems); Bell Atlantic April 15 Ex Parte at 9.

¹¹⁸⁵ Lincoln Tel. comments at 9 (re-engineering customer service systems only for purpose of supporting competitors would be extremely profligate); GVNW comments at 10-12.

does not take longer than provisioning for its own customers. 1186

. . . .

have proceeded to implement rules for local competition, several of which include provisions concerning electronic interfaces. 1204 The Georgia Commission ordered Bell-South to establish electronic operational interfaces by July 15, 1996, and ordered both incumbent BellSouth and requesting carrier AT&T to submit a joint report to the commission within thirty days concerning the implementation schedule necessary to deploy such interfaces. 1205 After a motion for reconsideration, the Georgia Commission provided BellSouth with an additional month to establish these interfaces and added additional deadlines for the deployment and operation of such interfaces. 1206 The Illinois Commission ordered Ameritech and Centel to provide competitors with "all operational interfaces at

¹¹⁸⁶ Letter from Sandra Wagner, Director, Federal Regulatory, SBC Communications, Inc. to William Caton, Acting Secretary, FCC, June 4, 1996 (SBC June 4 Ex Parte).

¹²⁰⁴ Letter from Bruce Cox, Government Affairs Director, AT&T to William Caton, Acting Secretary, FCC, July 11, 1996 (AT&T July 11 Ex Parte). AT&T submitted orders or rules from eight states that have taken action on the issue of electronic interfaces. Id.

¹²⁰⁵ Petition of AT&T for the Commission to Establish Resale Rules, Rates, Terms and Conditions and the Initial Unbundling of Services, Docket No. 6352-U at 11-12, 15 (Georgia Commission May 29, 1996). The Georgia Commission ordered BellSouth to establish interfaces for "pre-service ordering, service ordering and provisioning, directory listing and line information databases, service trouble reporting, and daily usage data." Id. at 15.

¹²⁰⁶ Motion for Reconsideration in Docket No. 6352-U (Georgia Commission July 2, 1996). The Georgia Commission directed that most electronic interfaces must be fully operational by the end of 1996, and established March 31, 1997 as an absolute deadline. Id.

parity with those provided their own retail customers." 1207 The Louisiana Commission has proposed rules on local competition that require incumbent LECs to deploy systems for competitors that are equivalent to those used by incumbents for their own retail exchange services. 1208 Under those rules, such access must be equal to that provided to an incumbent LECs' own personnel.1209 The California Commission adopted interim rules ordering incumbent LECs to deploy automated on-line systems for access by competitors. 1210 The Indiana Commission concluded that a competitor's ability to utilize "electronic access, technical interfaces, or access to databases to place service orders, receive phone number assignments, receive information necessary to bill [its] customers and to inform the incumbent LEC of cases of trouble" is essential to the development of resale competition. 1211 Indiana

1209 Id.

1210 Order Instituting Rulemaking on the Commission's Own Motion into Competition for Local Exchange Service, R. 95-04-043 and I. 95-04-044 (California Commission April 26, 1995). The California Commission ordered such access for "service ordering and implementation scheduling." Id. at Appendix E, 14.

1211 In the Matter of the Investigation on the Commission's Own Motion into Any and All Matters Relating to Local Telephone Exchange Competition Within the State of Indiana, Cause No. 39983, Interim Order on Bundled Resale and Other Issues (Indiana Commission July 1, 1996).

¹²⁰⁷ Illinois Wholesale Order. The Illinois Commission ordered both incumbent LECs, to the extent they could not "fully and immediately" implement operational parity, to submit a plan with specific timetables for achieving compliance. Id. at 51.

¹²⁰⁸ Substitute Proposed Regulations for Competition in the Local Telecommunications Market, Docket No. U-20883 (Louisiana Commission March 5, 1996). The Louisiana Commission further requires "direct on-line access" to incumbent LECs' mechanized order entry system, number administration system, trouble reporting and monitoring system, customer usage data, and local listing databases. Id.

ordered incumbent LECs to provide all operational interfaces at parity with those the incumbent provides to its own retail customers. The Ohio Commission's rules on local competition require all LECs to provide "non-discriminatory, automated operational support systems" that support access by competing carriers to such functions as pre-ordering, ordering, provisioning, repair and maintenance, number assignment, and billing. The Oklahoma Commission has proposed rules that require an incumbent LEC, to the extent it provides itself, its affiliates or subsidiaries, automated interfaces for the purpose of service ordering, maintenance or repair, to make such interfaces available to competitors.

c. Discussion

516. We conclude that operations support systems and the information they contain fall squarely within the definition of "network element" and must be unbundled upon request under section 251(c)(3), as discussed below. Congress included in the definition of "network element" the terms "databases" and "information sufficient for billing and collection or used in the transmission, routing, or

¹²¹² Id. at 49. The Commission also ordered incumbents Ameritech and GTE, to the extent they contend that they are unable to fully and immediately implement operational parity, to submit a comprehensive plan with specific timetables for achieving compliance. Id.

¹²¹³ In the Matter of the Commission Investigation Relative to the Establishment of Local Exchange Competition and Other Competitive Issues, Case No. 95-845-TP-COI (Ohio Commission June 12, 1996).

¹²¹⁴ All Sources Proposed Rules, Docket No. RM950000019 (Local Telephone Competition) (Oklahoma Commission March 7, 1996). Oklahoma rules clarify that such interfaces should not permit competitors to directly access the incumbent's underlying systems. Id. at 79.

believe that the inclusion of these terms in the definition of "network element" is a recognition that the massive operations support systems employed by incumbent LECs, and the information such systems maintain and update to administer telecommunications networks and services, represent a significant potential barrier to entry. It is these systems that determine, in large part, the speed and efficiency with which incumbent LECs can market, order, provision, and maintain telecommunications services and facilities. Thus, we agree with Ameritech that "[o]perational interfaces are essential to promote viable competitive entry." 1224

517. Nondiscriminatory access to operations support systems functions can be viewed in at least three ways. First, operations support systems themselves can be characterized as "databases" or "facilit[ies] . . . used in the provision of a telecommunications service," and the functions performed by such systems can be characterized as "features, functions, and capabilities that are provided by means of such facilit[ies]." 1286 Second, the information contained in, and processed by operations support systems can be classified as "information sufficient for billing and collection or used in the transmission, routing, or other provision of a telecommunications service." 1256 Third. nondiscriminatory access to the functions of operations support systems, which would include access to the information they contain, could be viewed as a "term or condition" of unbundling other network elements under section 251(c)(3), or resale under section 251(c)(4). Thus, we conclude that, under any of these interpretations, operations support systems functions are subject to the

^{123 47} U.S.C. § 153(29) (emphasis added).

¹²⁵⁴ Ameritech July 10 Ex Parte at 5.

^{1258 47} U.S.C. § 153(29).

¹²⁵⁰ Id.

nondiscriminatory access duty imposed by section 251 (c)(3), and the duty imposed by section 251(c)(4) to provide resale services under just, reasonable, and non-discriminatory terms and conditions.

- 518. Much of the information maintained by these systems is critical to the ability of other carriers to compete with incumbent LECs using unbundled network elements or resold services. Without access to review, inter alia, available telephone numbers, service interval information, and maintenance histories, competing carriers would operate at a significant disadvantage with respect to the incumbent. Other information, such as the facilities and services assigned to a particular customer, is necessary to a competing carrier's ability to provision and offer competing services to incumbent LEC customers. 1257 Finally, if competing carriers are unable to perform the functions of pre-ordering, ordering, provisioning, maintenance and repair, and billing for network elements and resale services in substantially the same time and manner that an incumbent can for itself, competing carriers will be severely disadvantaged, if not precluded altogether, from fairly competing. Thus providing nondiscriminatory access to these support systems functions, which would include access to the information such systems contain, is vital to creating opportunities for meaningful competition.
 - 519. As noted in the comments above, several state commissions have ordered real-time access or have ongoing proceedings working to develop and implement it within their jurisdictions. The New York Commission, building on its pioneering experience with the Rochester Telephone "Open Market Plan," has facilitated a working group on electronic interfaces comprised of both in-

which currently own the overwhelming majority of local facilities in any market, provide this information to those new entrants who initially will rely to varying degrees on incumbent LEC facilities. See e.g., AT&T comments at 33-34.

cumbent LECs and potential competitors. 1888 The New York Commission focused on these issues in response to the frustrations and concerns of resellers in the Rochester market.1250 In particular, AT&T alleged that it was "severely disadvantaged due to the fact that [Rochester Telephone] has failed to provide procedures for resellers to access [their] databases for on-line queries needed to perform basic service functions [such] as scheduling customer appointments." 1260 The New York Commission has concluded that wherever possible NYNEX will provide new entrants with real-time electronic access to its systems. 1261 As another example, the Georgia Commission recently ordered BellSouth to provide electronic interfaces such that resellers have the same access to operations support systems and informational databases as BellSouth does, including interfaces for pre-ordering, ordering and provisioning, service trouble reporting, and customer daily usage. 1262 In testimony before the Georgia Commission. a BellSouth witness acknowledged that "Inlo one is happy,

¹³⁵⁸ Order Declaring Resale Prohibitions Void and Establishing Tariff Terms, Case 94-C-0095, et al. (New York Commission June 25, 1996).

¹²⁵⁰ Order Declaring Resale Prohibitions Void and Establishing Tariff Terms, Case 94-C-0095, et al. (New York Commission June 25, 1996). In New York proceeding, resellers argued that interfaces were as important to competition as the level of the wholesale discount. Id.

¹²⁶⁰ AT&T Communications of New York, Inc. Complaint, Petition fer Declaratory Judgment and for Reconsideration of Opinion No. 94-25 New York Commission, page 12.

¹²⁶¹ Id. at 13-14. The New York Commission operations working group has focused on five areas for implementation: (1) service ordering, (2) trouble administration, (3) credit and collection, (4) billing and usage detail, (5) local exchange company requirements. Id. at 13-17.

¹²⁶² See In Re Petition of AT&T for the Commission to Establish Resale Rules, Rates, Terms and Conditions and the Initial Unbundling of Services, Docket 6352, (Georgia Commission May 29, 1996).

As noted above, Georgia ordered BellSouth to establish these interfaces within two months of its order (by July 15, 1996), but recently extended the deadline an additional month (to August 15th). Both the Illinois and Indiana Commissions ordered incumbent LECs immediately to provide to competitors access to operational interfaces at parity with those provided to their own retail customers, or submit plans with specific timetables for achieving such access. Several other states have passed laws or adopted rules ordering incumbent LECs to provide interfaces for access equal to that the incumbent provides itself. We recognize the lead taken by these states and others, and we generally rely upon their conclusions in this Order.

520. We conclude that providing nondiscriminatory access to operations support systems functions is technically feasible. Incumbent LECs today provide IXCs with different types of electronic ordering or trouble interfaces that demonstrate the feasibility of such access, and perhaps also provide a basis for adapting such interfaces for

¹²⁶³ Id.

¹²⁶⁴ Motion for Reconsideration in Docket No. 6352-U (Georgia Commission July 2, 1996).

Motion into Any and All Matters Relating to Local Telephone Exchange Competition Within the State of Indiana, Cause No. 39983, Interim Order on Bundled Resale and Other Issues (Indiana Commissions July 1, 1996); Illinois Wholesale Order.

of the Commission Investigation Relative to the Establishment of Local Exchange Competition and Other Competitive Issues, Case No. 95-845-TP-COI (Ohio Commission June 12, 1996); Order Instituting Rulemaking on the Commission's Own Motion into Competition for Local Exchange Service, R. 95-04-043 and I. 95-04-044 (California Commission April 26, 1995).

use between local service providers. Further, as discussed above, several incumbent LECs, including NYNEX and Bell Atlantic, are already testing and operating interfaces that support limited functions, and are developing the interfaces to support access to the remaining functions identified by most potential competitors. Some incumbent LECs acknowledge that nondiscriminatory access to operations support systems functions is technically feasible. Finally, several industry groups are actively establishing standards for inter-telecommunications company transactions. 1270

521. Section 251(d)(2)(A) requires the Commission to consider whether "access to such network elements as are proprietary in nature is necessary." Incumbent LECs argue that there are proprietary interfaces used to access these databases and information. Parties seeking to compete with incumbent LECs counter that access to such databases and information is vitally important to the ability to broadly compete with the incumbent. As discussed above, competitors also argue that such access is necessary to order, provision, and maintain unbundled network elements and resold services, and to market competing services effectively to an incumbent LEC's customers. We find that it is absolutely necessary for competitive carriers to have access to operations support systems functions in order to successfully enter the local service market.

¹²⁶⁷ See, e.g., Bell Atlantic June 21 Ex Parte; NYNEX July 12 Ex Parte; NYNEX July 17 Ex Parte; U S West June 28 Ex Parte; U S West July 9 Ex Parte.

¹²⁶⁸ Bell Atlantic June 21 Ex Parte; NYNEX July 17 Ex Parte.

¹²⁶⁰ See NYNEX reply at 33-34; GTE reply at 23 n.28; Bell Atlantic reply at 14.

¹²⁷⁰ Industry standards committees include ECIC, EDI, OBF and T1M1. See Ameritech July 10 Ex Parte, Sprint June 25 Ex Parte, NYNEX July 17 Ex Parte.

^{1271 47} U.S.C. § 251(d) (2) (A).

- 522. Section 251(d)(2)(B) requires the Commission to consider whether "the failure to provide access to such network elements would impair the ability of the telecommunications carrier seeking access to provide the services that it seeks to offer." As mentioned above, parties identified access to operations support systems functions as critical to the provision of local service. We find that such operations support systems functions are essential to the ability of competitors to provide services in a fully competitive local service market. Therefore, we conclude that competitors' ability to provide service successfully would be significantly impaired if they did not have access to incumbent LEC's operations support systems functions.
- 523. We thus conclude that an incumbent LEC must provide nondiscriminatory access to their operations support systems functions for pre-ordering, ordering, provisioning, maintenance and repair, and billing available to the LEC itself. Such nondiscriminatory access necessarily includes access to the functionality of any internal gateway systems the incumbent employs in performing the above functions for its own customers. For example, to the extent that customer service representatives of the incumbent have access to available telephone numbers or service interval information during customer contacts, the incumbent must provide the same access to competing

^{1272 47} U.S.C. § 251(d)(2)(B).

¹²⁷⁸ We adopt the definition of these terms as set forth in the AT&T-Bell Atlantic Joint Ex Parts as the minimum necessary for our requirements. We note, however, that individual incumbent LEC's operations support systems may not clearly mirror these definitions. Nevertheless, incumbent LECs must provide nondiscriminatory access to the full range of functions within pre-ordering, ordering, provisioning, maintenance and repair and billing enjoyed by the incumbent LEC.

¹²⁷⁴ A gateway system refers to any electronic interface the incumbent LEC has created for its own use in accessing support systems for providing pre-ordering, ordering, provisioning, repair and maintenance, and billing.

providers. Obviously, an incumbent that provisions network resources electronically does not discharge its obligation under section 251(c)(3) by offering competing providers access that involves human intervention, such as facsimile-based ordering.¹²⁷⁶

- 524. We recognize that, although technically feasible, providing nondiscriminatory access to operations support systems functions may require some mod fications to existing systems necessary to accommodate such access by competing providers. 1276 Although, as discussed above, many incumbent LECs are actively developing these systems, even the largest and most advanced incumbent LECs have not completed interfaces that provide such access to all of their support systems functions. State commissions such as Georgia, Illinois, and Indiana, however, have ordered that such access be made available to requesting carriers in the near term. As a practical matter, the interfaces developed by incumbents to accommodate nondiscriminatory access will likely provide such access for services and elements beyond a particular state's boundaries, and thus we believe that requirements for such access by a small number of states representing a cross-section of the country will quickly lead to incumbents providing access in all regions.
- 525. In all cases, however, we conclude that in order to comply fully with section 251(c)(3) an incumbent LEC must provide, upon request, nondiscriminatory access to operations support systems functions for preordering, provisioning, maintenance and repair, and billing of unbundled network elements under section 251

¹²⁷⁶ Such access was all that Rochester Telephone provided to AT&T, when AT&T attempted to compete as a reseller of Rochester Telephone service. See Letter from Bruce Cox, Government Affairs Director, AT&T to William Caton, Acting Secretary, FCC, July 10, 1996 (AT&T July 10 Ex Parte).

¹²⁷⁶ See supra, Section V.G. regarding accommodation of unbundling.

- (c)(3) and resold services under section 251(c)(4). Incumbent LECs that currently do not comply with this requirement of section 251(c)(3) must do so as expeditiously as possible, but in any event no later than January 1, 1997. We believe that the record demonstrates that incumbent LECs and several national standards-setting organizations have made significant progress in developing such access. This progress is also reflected in a number of states requiring competitor access to these transactional functions in the near term. Thus, we believe that it is reasonable to expect that by January 1, 1997, new entrants will be able to compete for end user customers by obtaining nondiscriminatory access to operations support systems functions.
- rules in this section on small incumbent LECs. For example, RTC urges us to recognize the differences between carriers in regards to computerized network administration and operational interfaces. Our requirement of non-discriminatory access to operations support systems recognizes that different incumbent LECs possess different existing systems. We also note, however, that sections 251(f) of the 1996 Act provides relief for certain small LECs from our regulations implementing section 251.
- 527. Ideally, each incumbent LEC would provide access to support systems through a nationally standardized gateway. Such national standards would eliminate the need for new entrants to develop multiple interface systems, one for each incumbent. We believe that the progress made by standards-setting organizations to date evidences a strong national movement toward such a uniform standard. For example, both AT&T and Bell Atlantic agree that, given appropriate guidance from the Commis-

¹²⁷⁷ See infra, Section VII.B. for a discussion of exemptions and suspensions for small and rural incumbent LECs.

¹²⁷⁸ See Sprint June 25 Ex Parte; AT&T comments at 38; Bell-South reply at 27.

sion, the industry can achieve consensus on national standards such that within 12 months 95% of all inter-telecommunications company transactions may be processed via nationally standardized electronic gateways. 1270

528. In order to ensure continued progress in establishing national standards, we propose to monitor closely the progress of industry organizations as they implement the rules adopted in this proceeding. Depending upon the progress made, we will make a determination in the near future as to whether our obligations under the 1996 Act require us to issue a separate notice of proposed rule-making or take other action to guide industry efforts at arriving at appropriate national standards for access to operations support systems.

c. Discussion

(1) Operator Services and Directory Assistance

534. We conclude that incumbent LECs are under the same duty to permit competing carriers nondiscriminatory access to operator services and directory assistance facilities as all LECs are under section 251(b)(3). We further conclude that, if a carrier requests an incumbent LEC to unbundle the facilities and functionalities providing operator services and directory assistance as separate network elements, the incumbent LEC must provide the competing provider with nondiscriminatory access to such facilities and functionalities at any technically feasible point. We believe that these facilities and functionalities are important to facilitate competition in the local exchange market. Further, the 1996 Act imposes upon BOCs, as a condition of entry into in-region interLATA services the duty to provide nondiscriminatory access to

¹²⁷⁰ AT&T-Bell Atlantic Joint Ex Parte.

¹³⁰⁰ See Dialing Parity Order supra, Section I.

directory assistance services and operator call completion services. We therefore conclude that unbundling facilities and functionalities providing operator services and directory assistance is consistent with the intent of Congress.

- 535. As discussed in our section on nondiscriminatory access under section 251(b)(3), 1802 the provision of non-discriminatory access to operator services and directory assistance must conform to the requirements of section 222, which restricts carrier's use of CPNI. 1803 In particular, access to directory assistance and underlying directory information does not require incumbent LECs to provide access to unlisted or unpublished telephone numbers, or other information that the incumbent LEC's customer has requested the LEC not to make available. In conforming to section 222, we anticipate that incumbent LECs will provide such access in a manner that will protect against the inadvertent release of unlisted customer names and numbers.
- 536. We note that several competitors advocate unbundling the facilities and functionalities providing operator services and directory assistance from particular resold services or the unbundled local switching element, so that a competing provider can provide these services to its customers supported by its own systems rather than those of the incumbent LEC. 1304 Some incumbent LECs argue that

^{1801 47} U.S.C. § 271(c) (2) (B) (vii) (II)-(III).

¹⁸⁰² See Dialing Parity Order supra, Section I.

Telecommunications Carriers' Use of Customer Proprietary Network Information and other Customer Information, CC Docket No. 96-115, Notice of Proposed Rulemaking, FCC 96-221 (rel. May 17, 1996).

¹⁸⁰⁴ See, e.g., AT&T comments at 26; Cable & Wireless comments at 20; Colorado Commission comments at 24; DOJ comments at 21; Frontier comments at 17 n.32; MCI comments at 18-20; Jones Intercable reply at 30.

such unbundling, however, is not technically feasible because of their inability to route individual end user calls to multiple systems. 1308 We find that unbundling both the facilities and functionalities providing operator services and directory assistance as separate network elements will be beneficial to competition and will aid the ability of competing providers to differentiate their service from the incumbent LECs. We also note that the Illinois Commission has recently ordered such access. 1806 We therefore find that incumbent LECs must unbundle the facilities and functionalities providing operator services and directory assistance from resold services and other unbundled network elements to the extent technically feasible. As discussed above in our section on unbundled switching, we require incumbent LECs, to the extent technically feasible, to provide customized routing, which would include such routing to a competitor's operator services or directory assistance platform. 1307

537. We also note that some competitors seek access to operator services and directory assistance in order to serve their own customers. Some of these parties argue that nondiscriminatory access to such network elements requires incumbent LECs to provide rebranded operator call completion services and directory assistance to the competing carrier's customers. Incumbent LECs argue that the provision of these services on an unbranded or rebranded basic is not technically feasible because of their inability at the operator services or directory assistance platforms to identify the carrier serving the end user. As we concluded in our discussion on section 251(b)(3),

¹³⁰⁵ SBC reply at 22-23.

¹³⁰⁶ See Illinois Wholesale Order.

¹³⁰⁷ See infra, Section V.I.2.

¹³⁰⁸ AT&T comments at 26.

¹³⁰⁹ ACSI comments at 47-48; AT&T comments at 26; Comcast comments at 20; GCI comments at 12.

¹⁸¹⁰ SBC reply at 22-23.

we find that incumbent LECs must permit nondiscriminatory access to both operator services and directory assistance in the same manner required of all LECs. 1811 We make no finding on the technical feasibility of providing branded or unbranded service to competitors based on the record before us. We note, however, that the Illinois Commission has ordered incumbent LECs to provide rebranded operator call completion services and directory assistance to requesting competitive carriers. 1812

538. As discussed above, incumbent LECs must provide access to databases as unbundled network elements.1818 We find that the databases used in the provision of both operator call completion services and directory assistance must be unbundled by incumbent LECs upon a request for access by a competing provider. In particular, the directory assistance database must be unbundled for access by requesting carriers. 1814 Such access must include both entry of the requesting carrier's customer information into the database, and the ability to read such a database, so as to enable requesting carriers to provide operator services and directory assistance concerning incumbent LEC customer information. We clarify, however, that the entry of a competitor's customer information into an incumbent LEC's directory assistance database can be mediated by the incumbent LEC to prevent unauthorized use of the database. We find that the arrangement ordered by the California Commission concerning the shared use of such a database by Pacific Bell and GTE is one possible method of providing such access, 1815

¹⁸¹¹ See Dialing Parity Order supra, Section I.

¹⁸¹² See Illinois Wholesale Order.

¹⁸¹³ See supra, Section V.J.

¹³¹⁴ We find the joint directory assistance database used by Pacific Bell and GTE to be one method of such access. MCI comments at 38.

¹⁸¹⁵ See Re GTE California Incorporated, 31 CPUC 2d 370 (1989).

- 539. Section 251(d)(2)(A) requires the Commission to consider whether "access to such network elements as are proprietary in nature is necessary." Parties generally did not identify proprietary concerns with unbundling access to operator call completion services or directory assistance. Incumbent LECs generally did not claim a proprietary interest in their directory assistance databases. Many parties contend that proprietary interests leading to restrictions on use or sharing of such database information would injure their ability to compete effectively for local service. For the reasons described below, we find that access to the systems supporting both operator call completion services and directory assistance is necessary for new entrants to provide competing local exchange service.
- 540. Section 251(d)(2)(B) requires the Commission to consider whether "the failure to provide access to such network elements would impair the ability of the telecommunications carrier seeking access to provide the services that it seeks to offer." Parties identified access to operator call completion services and directory assistance as critical to the provision of local service. Therefore we conclude that competitors' ability to provide service would be significantly impaired if they did not have access to incumbent LECs' operator call completion services and directory assistance.
- 554. Finally, in accordance with our interpretation of the term "technically feasible," we conclude that, if a particular method of interconnection is currently employed between two networks, or has been used successfully in the past, a rebuttable presumption is created that such a

^{1016 47} U.S.C. § 251(d)(2)(A).

¹³¹⁷ MCI comments at 37-38.

^{1318 47} U.S.C. § 251(d) (2) (B).

¹⁸¹⁹ MCI comments at 37-38.

method is technically feasible for substantially similar network architectures. Moreover, because the obligation of incumbent LECs to provide interconnection or access to unbundled elements by any technically feasible means arises from sections 251(c)(2) and 251(c)(3), we conclude that incumbent LECs bear the burden of demonstrating the technical infeasibility of a particular method of interconnection or access at any individual point.

(3). Discussion

585. We believe that incumbent LECs have the incentive and capability to impede competitive entry by minimizing the amount of space that is available for collocation by competitors. Accordingly, we adopt our Expanded Interconnection space allocation rules for purposes of section 251, except as indicated herein. LECs will thus be required to make space available to requesting carriers on a first-come, first-served basis. We also conclude that collocators seeking to expand their collocated space should be allowed to use contiguous space where available. We further conclude that LECs should not be required to lease or construct additional space to provide physical collocation to interconnectors when existing space has been exhausted. We find such a requirement unnecessary because section 251(c)(6) allows incumbent LECs to provide virtual collocation where physical collocation is not practical for technical reasons or because of space limitations. Consistent with the requirements and findings of the Expanded Interconnection proceeding, we conclude that incumbent LECs should be required to take collocator demand into account when renovating existing facilities and constructing or leasing new facilities, just as they consider demand for other services when undertaking such projects. We find that this requirement is necessary in order to ensure that sufficient collocation space will be available in the future. We decline, however, to adopt a general rule requiring LECs to file reports on the status and planned increase and use of space. State commissions will determine whether sufficient space is available for physical collocation, and we conclude that they have authority under the 1996 Act to require incumbent LECs to file such reports. We expect individual state commissions to determine whether the filing of such reports is warranted.

VII. PRICING OF INTERCONNECTION AND UNBUNDLED ELEMENTS

A. Overview

618. The prices of interconnection and unbundled elements, along with prices of resale and transport and termination, are critical terms and conditions of any interconnection agreement. If carriers can agree on such prices voluntarily without government intervention, these agreements will be submitted directly to the states for approval under section 252. To the extent that the carriers, in voluntary negotiations, cannot determine the prices, state commissions will have to set those prices. The price levels set by state commissions will determine whether the 1996 Act is implemented in a manner that is pro-competitor and favors one party (whether favoring incumbents or entrants) or, as we believe Congress intended, procompetition. As discussed more fully in Section II.D. above, it is therefore critical to implementing Congress's pro-competitive, de-regulatory national policy framework to establish among the states a common, pro-competition understanding of the pricing standards for interconnection and unbundled elements, resale, and transport and termination. While such a common interpretation might eventually emerge through judicial review of state arbitration decisions, we believe that such a process could delay competition for years and require carriers to incur substantial legal costs. 1400 We therefore conclude that, to ex-

¹⁴⁰⁰ For a discussion of our legal authority to adopt national pricing rules, see supra, Section II.D.

pedite the development of fair and efficient competition, we must set forth rules now establishing this common, pro-competition understanding of the 1996 Act's pricing standards. Accordingly, the rules we adopt today set forth the methodological principles for states to use in setting prices. This section addresses interconnection and unbundled elements, and subsequent sections address resale and transport and termination, respectively.

- 619. While every state should, to the maximum extent feasible, immediately apply the pricing methodology for interconnection and unbundled elements that we set forth below, we recognize that not every state will have the resources to implement this pricing methodology immediately in the arbitrations that will need to be decided this fall. Therefore, so that competition is not impaired in the interim, we establish default proxies that a state commission shall use to resolve arbitrations in the period before it applies the pricing methodology. In most cases, these default proxies for unbundled elements and interconnection are ceilings, and states may select lower prices. In one instance, the default proxy we establish is a price range. Once a state sets prices according to an economic cost study conducted pursuant to the cost-based pricing methodology we outline, the defaults cease to apply. In setting a rate pursuant to the cost-based pricing methodology, and especially when setting a rate above a default proxy ceiling or outside the default proxy range, the state must give full and fair effect to the economic costing methodology we set forth in this Order and must create a factual record, including the cost study, sufficient for purposes of review after notice and opportunity for the affected parties to participate.
- 620. In the following sections, we first set forth generally, based on the current record, a cost-based pricing methodology based on forward-looking economic costs, which we conclude is the approach for setting prices that best furthers the goals of the 1996 Act. In dynamic competitive markets, firms take action based not on embedded

costs, but on the relationship between market-determined prices and forward-looking economic costs. If market prices exceed forward-looking economic costs, new competitors will enter the market. If their forward-looking economic costs exceed market prices, new competitors will not enter the market and existing competitors may decide to leave. Prices for unbundled elements under section 251 must be based on cost under the law, and that should be read as requiring that prices be based on forward-looking economic costs. New entrants should make their decisions whether to purchase unbundled elements or to build their own facilities based on the relative economic costs of these options. By contrast, because the cost of building an element is based on forward-looking economic costs, new entrants' investment decisions would be distorted if the price of unbundled elements were based on embedded costs. In arbitrations of interconnection arrangements, or in rulemakings the results of which will be applied in arbitrations, states must set prices for interconnection and unbundled network elements based on the forward-looking, long-run, incremental cost methodology we describe below. Using this methodology, states may not set prices lower than the forward-looking increment costs directly attributable to provision of a given element. They may set prices to permit recovery of a reasonable share of forward-looking joint and common costs of network elements,1461 In the aftermath of the arbitrations and relying on the state experience, we will continue to review this costing methodology, and issue additional guidance as necessary.

621. We reject various arguments raised by parties regarding the recovery of costs other than forward-looking economic costs in section 251(c)(2) and (c)(3) prices,

Section VII.B.2.a. We define what we consider to be a reasonable share of forward-looking joint and common costs infra, Section VII.B.2.a.

including the possible recovery of: (1) embedded or accounting costs in excess of economic costs; (2) incumbent LECs' opportunity costs; (3) universal service subsidies; and (4) access charges. As discussed in Section VII.B.2.a. below, certain portions of access charges may continue to be collected for an interim period in addition to section 251(c)(3) prices.

- 622. With respect to prices developed under the forward-looking, cost-based pricing methodology, we conclude that incumbent LECs' rates for interconnection and unbundled elements must recover costs in a manner that reflects the way they are incurred. We adopt certain rules that states must follow in setting rates in arbitrations. These rules are designed to ensure the efficient cost-based rates required by the 1996 Act.
- 623. In the next section of the Order, we establish default proxies that states may elect to use prior to utilizing an economic study and developing prices using the cost-based pricing methodology. We recognize that certain states may find it difficult to apply an economic costing methodology within the statutory time frame for arbitrating interconnection disputes. We therefore set forth default proxies that will be relatively easy to apply on an interim basis to interconnection arrangements. We discuss with respect to particular unbundled elements the reasonable rate structure for those elements and the particular default proxies we are establishing for use pending our adoption of a generic forward-looking cost model. Finally, we discuss the following additional matters: generic forward-looking costing models that we intend to examine further by the first quarter of 1997 in order to determine whether any of those models, with modifications, could serve as better default proxies; the future adjustment of rates; the relationship of unbundled element prices to retail prices; and the meaning of the statutory prohibition against discrimination in sections 251 and 252.

624. Those states that have already established methodologies for setting interconnection and unbundled rates must review those methodologies against the rules we are adopting in this Order. To the extent a state's methodology is consistent with the approach we set forth herein, the state may apply that methodology in any section 252 arbitration. However, if a state's methodology is not consistent with the rules we adopt today, the state must modify its approach. We invite any state uncertain about whether its approach complies with this Order to seek a declaratory ruling from the Commission.

B. Cost-Based Pricing Methodology

625. As discussed more fully in Section II.D. above, although the states have the crucial role of setting specific rates in arbitrations, the Commission must establish a set of national pricing principles in order to implement Congress's national policy framework. For the reasons set forth in the preceding section and as more fully explained below, we are adopting a cost-based methodology for states to follow in setting interconnection and unbundled element rates. In setting forth the cost-based pricing methodology for interconnection and access to unbundled elements. there are three basic sets of questions that must be addressed. First, does the 1996 Act require that the same standard apply to the pricing of interconnection provided pursuant to section 251(c)(2), and unbundled elements provided pursuant to section 251(c)(3)? Second, what is the appropriate methodology for establishing the price levels for interconnection and for each unbundled element. how should costs be defined, and is the price based on economic costs, embedded costs, or other costs? Third, what are the appropriate rate structures to be used to set prices designed to recover costs, including a reasonable profit? We address each of these questions in the following sections.

664. In contrast, several incumbent LECs and state public utility commissions maintain that incumbent LECs should be permitted to recover their embedded costs in the rates set for interconnection, collocation, and unbundled network elements. These commenters claim that rates based on incremental costs alone fail to account for certain costs historically incurred to accomplish carrier-of-last-resort and universal service social policy objectives. The Attorneys General caution the Commission not to classify legitimate contributions to joint and common costs as impermissible implicit universal service subsidies. 1656

(3) Discussion

above, that we have the requisite legal authority and that we should establish national pricing rules, we conclude here that prices for interconnection and unbundled elements pursuant to sections 251(c)(2), 251(c)(3), and 252(d)(1), should be set at forward-looking long-run economic cost. In practice, this will mean that prices are based on the TSLRIC of the network element, which we will call Total Element Long Run Incremental Cost (TELRIC), and will include a reasonable allocation of forward-looking joint and common costs. The 1996 Act encourages competition by removing barriers to entry and providing an opportunity for potential new entrants to purchase unbundled incumbent LEC network elements to compete efficiently to provide local exchange services. We

Springs, et al. comments at 16; BellSouth comments at 57; Matanuska Tel. comments at 2-3; TDS comments at 20; SBC comments at 89; Western Alliance comments at 6-7; but see BellSouth comments at 57 (if the universal service proceeding establishes a federal fund or if the states establish explicit funds, there will be no need for subsidies to be built into interconnection and unbundled network element rates).

¹⁶⁵⁶ Attorneys General reply at 10-11.

believe that the prices that potential entrants pay for these elements should reflect forward-looking economic costs in order to encourage efficient levels of investment and entry.

678. While we are adopting a version of the methodology commonly referred to as TSLRIC as the basis for pricing interconnection and unbundled elements, we are coining the term "total element long run incremental cost" (TELRIC) to describe our version of this methodology. The incumbent LEC offerings to be priced using this methodology generally will be "network elements," rather than "telecommunications services," as defined by the 1996 Act. 1683 More fundamentally, we believe that TELRICbased pricing of discrete network elements or facilities, such as local loops and switching, is likely to be much more economically rational than TSLRIC-based pricing of conventional services, such as interstate access service and local residential or business exchange service. As discussed in greater detail below, separate telecommunications services are typically provided over shared network facilities, the costs of which may be joint or common with respect to some services. The costs of local loops and their associated line cards in local switches, for example, are common with respect to interstate access service and local exchange service, because once these facilities are installed to provide one service they are able to provide the other at no additional cost. By contrast, the network elements, as we have defined them, 1684 largely correspond to distinct network facilities. Therefore, the amount of joint and common costs that must be allocated among separate offerings is likely to be much smaller using a TELRIC methodology rather than a TSLRIC approach that measures the costs of conventional services. Because it is difficult for regulators to determine an economically-optimal allocation of any such joint and common costs, we believe that pricing

^{1663 47} U.S.C. §§ 3(29), 3(46).

¹⁶⁸⁴ See supra Section V.

elements, defined as facilities with associated features and functions, is more reliable from the standpoint of economic efficiency than pricing services that use shared network facilities.

679. Description of TELRIC-Based Pricing Methodology. Adopting a pricing methodology based on forwardlooking, economic costs best replicates, to the extent possible, the conditions of a competitive market. In addition, a forward-looking cost methodology duces the ability of an incumbent LEC to engage in anti-competitive behavior. Congress recognized in the 1996 Act that access to the incumbent LECs' bottleneck facilities is critical to making meaningful competition possible. As a result of the availability to competitors of the incumbent LEC's unbundled elements at their economic cost, consumers will be able to reap the benefits of the incumbent LECs' economies of scale and scope, as well as the benefits of competition. Because a pricing methodology based on forward-looking costs simulates the conditions in a competitive marketplace, it allows the requesting carrier to produce efficiently and to compete effectively, which should drive retail prices to their competitive levels. We believe that our adoption of a forward-looking cost-based pricing methodology should facilitate competition on a reasonable and efficient basis by all firms in the industry by establishing prices for interconnection and unbundled elements based on costs similar to those incurred by the incumbents, which may be expected to reduce the regulatory burdens and economic impact of our decision for many parties, including both small entities seeking to enter the local exchange markets and small incumbent LECs. 1685

682. We conclude that, under a TELRIC methodology, incumbent LECs' prices for interconnection and unbundled network elements shall recover the forward-look-

¹⁶⁸⁵ See Regulatory Flexibility Act, 5 U.S.C. §§ 601 et seq.

ing costs directly attributable to the specified element, as well as a reasonable allocation of forward-looking common costs. Per-unit costs shall be derived from total costs using reasonably accurate "fill factors" (estimates of the proportion of a facility that will be "filled" with network usage); that is, the per-unit costs associated with a particular element must be derived by dividing the total cost associated with the element by a reasonable projection of the actual total usage of the element. Directly attributable forward-looking costs include the incremental costs of facilities and operations that are dedicated to the element. Such costs typically include the investment costs and expenses related to primary plant used to provide that element. Directly attributable forward-looking costs also include the incremental costs of shared facilities and operations. Those costs shall be attributed to specific elements to the greatest extent possible. 1688 For example, the costs of conduits shared by both transport and local loops, and the costs of central office facilities shared by both local switching and tandem switching, shall be attributed to specific elements in reasonable proportions. More broadly, certain shared costs that have conventionally been treated as common costs (or overheads) shall be attributed directly to the individual elements to the greatest extent possible. The forward-looking costs directly attributable to local loops, for example, shall include not only the cost of the installed copper wire and telephone poles but also the cost of payroll and other back office operations relating to the line technicians, in addition to other attributable costs.

684. Under the second approach, the cost of interconnection and unbundled network elements would be based on existing network design and technology that are cur-

¹⁶⁸⁸ Compare Telephone Company-Cable Television Cross-Owner-ship Rules, CC Docket No. 87-266, Memorandum Opinion and Order on Reconsideration and Third Further Notice of Proposed Rulemaking, 10 FCC Red 244, 345-46 (1994).

rently in operation. 1680 Because this approach is not based on a hypothetical network in the short run, incumbent LECs could recover costs based on their existing operations, and prices for interconnection and unbundled elements that reflect inefficient or obsolete network design and technology. This is essentially an embedded cost methodology.

- 685. Under the third approach, prices for interconnection and access to unbundled elements would be developed from a forward-looking economic cost methodology based on the most efficient technology deployed in the incumbent LEC's current wire center locations. This approach mitigates incumbent LECs' concerns that a forward-looking pricing methodology ignores existing network design, while basing prices on efficient, new technology that is compatible with the existing infrastructure. This benchmark of forward-looking cost and existing network design most closely represents the incremental costs that incumbents actually expect to incur in making network elements available to new entrants. Moreover, this approach encourages facilities-based competition to the extent that new entrants, by designing more efficient network configurations, are able to provide the service at a lower cost than the incumbent LEC. We, therefore, conclude that the forward-looking pricing methodology for interconnection and unbundled network elements should be based on costs that assume that wire centers will be placed at the incumbent LEC's current wire center locations, but that the reconstructed local network will employ the most efficient technology for reasonably foreseeable capacity requirements.
- 686. We agree with USTA, Bell Atlantic, and Bell-South that, as a theoretical matter, the combination of significant sunk investment, declining technology costs, and competitive entry may increase the depreciation costs

¹⁶⁸⁶ See, e.g., BellSouth reply at 37; Roseville Tel. reply at 8; USTA reply at 18-19.

and cost of capital of incumbent LECs. We do not agree, however, that TSLRIC does not or cannot account for risks that an incumbent LEC incurs because it has sunk investments in facilities. On the contrary, properly designed depreciation schedules should account for expected declines in the value of capital goods. Both AT&T and MCI appear to agree with this proposition. 1690 For example, AT&T states, "[i]n order to estimate TSLRIC, one must perform a discounted cash flow analysis of the future costs associated with the decision to invest . . . One-time costs associated with the acquisition of capital goods are amortized over the economic life of the assets using the user cost of capital . . . , which requires accounting for both expected capital good price changes and economic depreciation." 1691 Moreover, we are confident that parties to an arbitration with TELRIC studies can propose specific depreciation rate adjustments that reflect expected asset values over time.

690. Summary of TELRIC Methodology. The following summarizes our conclusions regarding setting prices of interconnection and access to unbundled network elements based on the TELRIC methodology for such elements. The increment that forms the basis for a TELRIC study shall be the entire quantity of the network element provided. As we have previously stated, all costs associated

¹⁶⁹⁰ See Letter from Leonard S. Sawicki, Director, FCC Affairs, MCI Telecommunications Corp. to William F. Caton, Acting Secretary, FCC, July 24, 1996 at Attachment (Depreciation and Capital Recovery Issues: A Response to Professor Hausman), pp. 1-3; see also Letter from Richard N. Clarke, AT&T, to William F. Caton, Acting Secretary, FCC, July 19, 1996 at Attachment (Capital Recovery Issues in TSLRIC Pricing: Response to Professor Jerry A. Hausman).

¹⁶⁹¹ Letter from Richard N. Clarke, AT&T, to William F. Caton, Acting Secretary, FCC, July 19, 1996 at Attachment (Capital Recovery Issues in TSLRIC Pricing: Response to Professor Jerry A. Hausman), p. 8.

with the providing the element shall be included in the incremental cost. Only forward-looking, incremental costs shall be included in a TELRIC study. Costs must be based on the incumbent LEC's existing wire center locations and most efficient technology available.

. . . .

695. The incumbent LECs generally argue that common costs are quite significant, while several other parties maintain that these amounts are minimal. 1608 Because the unbundled network elements correspond, to a great extent, to discrete network facilities, and have different operating characteristics, we expect that common costs should be smaller than the common costs associated with the long-run incremental cost of a service. We expect that many facility costs that may be common with respect to the individual services provided by the facilities can be directly attributed to the facilities when offered as unbundled network elements. Moreover, defining the network elements at a relatively high level of aggregation, as we have done. 1000 should also reduce the magnitude of the common costs. A properly conducted TELRIC methodology will attribute costs to specific elements to the greatest possible extent, which will reduce the common costs. Nevertheless, there will remain some common costs that must be allocated among network elements and interconnection services. For example, at the sub-element level of study (e.g., identifying the respective costs of 2-wire loops, 4-wire loops, ISDN loops, and so on), common costs may be a significant proportion of all the costs that must be recovered from sub-elements. Given the likely asymmetry of information regarding network costs, we conclude that,

¹⁸⁰⁷ See, e.g., PacTel reply at 27-28; see also Cincinnati Bell reply at 10; USTA comments at Attachment 1 (Affidavit of Jerry A. Hausman), p.4 n.1.

¹⁰⁰⁸ See, e.g., Competition Policy Institute comments at 19; MCI comments at 66; Texas Public Utility Counsel comments at 24.

¹⁰⁰⁰ See supra, Section V., discussing unbundling requirements.

in the arbitration process, incumbent LECs shall have the burden to prove the specific nature and magnitude of these forward-looking common costs.

696. We conclude that forward-looking common costs shall be allocated among elements and services in a reasonable manner, consistent with the pro-competitive goals of the 1996 Act. One reasonable allocation method would be to allocate common costs using a fixed allocator, such as a percentage markup over the directly-attributable forward-looking costs. We conclude that a second reasonable allocation method would allocate only a relatively small share of common costs to certain critical network elements, such as the local loop and collocation, that are most difficult for entrants to replicate promptly (i.e., bottleneck facilities). Allocation of common costs on this basis ensures that the prices of network elements that are least likely to be subject to competition are not artificially inflated by a large allocation of common costs. On the other hand, certain other allocation methods would not be reasonable. For example, we conclude that an allocation methodology that relies exclusively on allocating common costs in inverse proportion to the sensitivity of demand for various network elements and services may not be used.1700 We conclude that such an allocation could unreasonably limit the extent of entry into local exchange markets by allocating more costs to, and thus raising the prices of, the most critical bottleneck inputs, the demand for which tends to be relatively inelastic. Such an alloca-

¹⁷⁰⁰ See Frank P. Ramsey, A Contribution to the Theory of Taxation, 37 Econ. J. 47 (1927); see generally Kenneth E. Train, Optimal Regulation: The Economic Theory of Natural Monopoly 115-40 (1992) (discussing efficiency properties of Ramsey prices); Bridger M. Mitchell & Ingo Vogelsang, Telecommunications Pricing: Theory and Practices 43-61 (1991). The sensitivity of demand is measured by the elasticity of demand, which is defined as the percentage change in the quantity of a service demanded for a one per cent change in price.

tion of these costs would undermine the pro-competitive objectives of the 1996 Act.

699. Reasonable Return on Investment and "Profit." Section 252(d)(1) states that rates for interconnection and access to unbundled elements "may include a reasonable profit." 1703 We find that the TELRIC pricing methodlogy we are adopting provides for such a reasonable profit and thus no additional profit is justified under the statutory language. We note there are two types of profit. First, in plain English, profit is defined as "the excess of returns over expenditure in a transaction or a series of transactions." 1704 This is also known as a "normal" profit, which is the total revenue required to cover all of the costs of a firm, including its opportunity costs. 1768 Second, there is "economic" profit, which is any return in excess of normal profit.1706 Thus, for example, if the normal return in an industry is 10 percent and a firm earns a return of 14 percent, the economic profit for that firm is 4 percent. Economic is also referred to as "supranormal" profit. We conclude that the definition of "normal" profit is embodied in "reasonable profit" under Section 252 (d)(1).

700. The concept of normal profit is embodied in forward-looking costs because the forward-looking cost of capital, i.e., the cost of obtaining debt and equity financing, is one of the forward-looking costs of providing the network elements. This forward-looking cost of capital is equal to a normal profit. We conclude that allowing greater than normal profits would not be "reasonable" under sections 251(c) and 252(d)(1). Thus, contrary

^{1703 47} U.S.C. § 252(d)(1).

¹⁷⁰⁴ Webster's New Collegiate Dictionary 931 (10th ed. 1994).

¹⁷⁰⁶ See David W. Pearce, The MIT Dictionary of Modern Economics (1994) at 310.

¹⁷⁰⁰ Id. at 415.

¹⁷⁰⁷ We note that our interpretation is consistent with existing Supreme Court precedent concerning what constitutes a reasonable

to the arguments put forth by several incumbent LECs, we find that adding an additional measure of profit to the risk-adjusted cost of capital in setting the prices for interconnection and access to unbundled elements would violate the requirements of sections 251(c) and 252 (d)(1) of the 1996 Act.

701. Possible accounting losses from the sale of interconnection and unbundled network elements using a reasonable forward-looking cost-based methodology do not neces-

rate of return for a regulated public utility. For example, in Blue-field Water Works, the Court stated:

A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties; but it has no constitutional right to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures.

Bluefield Water Works & Improvement Co. v. Public Service Comm'n of West Virginia, 262 U.S. 679, 692-93 (1923). Similarly, in FPC v. Hope Natural Gas, the Court stated:

... it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on the debt and dividends on the stock . . . By that standard the return to the equity owner should be commensurate with risks on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital.

Federal Power Comm'n v. Hope Natural Gas Co., 320 U.S. 591, 603 (1994) (Hope Natural Gas). Cf., Charles F. Phillips, Jr., The Economics of Regulation 260 (Rev. ed. 1965) ("... a regulated company must be afforded the opportunity not only of assuring its financial integrity so that it can maintain its credit standing and attract additional capital as needed, but also for earnings comparable to those of other companies having corresponding risks.").

1708 See supra, this Section, for a discussion of risk-adjusted cost of capital.

sarily indicate that incumbent LECs are being denied a "reasonable profit" under the statute. The use of a forward-looking, economic, cost-based pricing methodology, including a reasonable allocation of legitimate joint and common costs, will permit incumbent LECs the opportunity to earn a reasonable return on their investment in network elements. Finally, contrary to PacTel's argument, and as discussed below in detail, we conclude that our forward-looking cost-based pricing methodology is consistent with the Fifth Amendment and is not confiscatory.

702. Based on the current record, we conclude that the currently authorized rate of return at the federal or state level is a reasonable starting point for TELRIC calculations, and incumbent LECs bear the burden of demonstrating with specificity that the business risks that they face in providing unbundled network elements and interconnection services would justify a different risk-adjusted cost of capital or depreciation rate. These elements generally are bottleneck, monopoly services that do not now face significant competition. We recognize that incumbent LECs are likely to face increased risks given the overall increases in competition in this industry, which generally might warrant an increased cost of capital, but note that, earlier this year, we instituted a preliminary inquiry as to whether the currently authorized federal 11.25 percent rate of return is too high given the current marketplace cost of equity and debt. 1709 On the basis of the current record, we decline to engage in a time-consuming examination to determine a new rate of return, which may well require a detailed proceeding. States may adjust the cost of capital if the party demonstrates to a state commission that either a higher or lower level of cost of capital is warranted, without that commission conducting a "rate-of-return or other rate based proceeding." 1710 We note that the risk-

¹⁷⁰⁹ See Common Carrier Bureau Sets Pleading Schedule in Preliminary Rate of Return Inquiry, Public Notice, 11 FCC Rcd 3651 (Com. Car. Bur. 1996).

^{1710 47} U.S.C. § 252(d)(1)(A)(i).

adjusted cost of capital need not be uniform for all elements. We intend to re-examine the issue of the appropriate risk-adjusted cost of capital on an ongoing basis, particularly in light of the state commissions' experiences in addressing this issue in specific situations.

703. We disagree with the conclusion that, when there are mostly sunk costs, forward-looking economic costs should not be the basis for pricing interconnection elements. The TELRIC of an element has three components, the operating expenses, the depreciation cost, ¹⁷¹¹ and the appropriate risk-adjusted cost of capital. We conclude that an appropriate calculation of TELRIC will include a depreciation rate that reflects the true changes in economic value of an asset and a cost of capital that appropriately reflects the risks incurred by an investor. Thus, even in the presence of sunk costs, TELRIC-based prices are an appropriate pricing methodology.

(b) Cost Measures Not Included in Forward-Looking Cost Methodology

704. Embeded Costs. We read section 252(d)(1)(A)
(i) to prohibit states from conducting traditional rate-ofreturn or other rate-based proceedings to determine rates
for interconnection and access to unbundled network elements. We find that the parenthetical, "(determined without reference to a rate-of-return or other rate-based proceeding)," 1712 does not further define the type of costs
that may be considered, but rather specifies a type of proceeding that may not be employed to determine the cost
of interconnection and unbundled network elements. The
legislative history demonstrates that Congress was eager to
set in motion expeditiously the development of local com-

¹⁷¹¹ Depreciation is the method of recognizing as an expense the cost of a capital investment. Properly calculated economic depreciation is a periodic reduction in the book value of an asset that makes the book value equal to its economic or market value.

^{1712 47} U.S.C. § 252(d)(1)(A)(i).

petition and intended to avoid imposing the costs and administrative burdens associated with a traditional rate case. Prior to the joint conference, the Senate version of the 1996 Act contained the parenthetical language. In addition, the Senate version of the 1996 Act eliminated rate-of-return regulation, 1714 as did the House version. Conferees removed the provisions eliminating rate-of-return regulation, but retained the parenthetical.

whether historical or embedded costs should be considered or whether only forward-looking costs should be considered in setting arbitrated rates. We are not persuaded by incumbent LEC arguments that prices for interconnection and unbundled network elements must or should include any difference between the embedded costs they have incurred to provide those elements and their current economic costs. Neither a methodology that establishes the prices for interconnection and access to network elements directly on the costs reflected in the regulated books of account, nor a price based on forward looking costs plus an additional amount reflecting embedded costs, would be

¹⁷¹³ S. 652, 104th Cong., 1st Sess. § 251(d)(6)(A) (1995) ("the charge (A) shall be (i) based on the cost (determined without reference to a rate-of-return or other rate-based proceeding) of providing the unbundled element...").

⁽A) In instituting the price flexibility required under paragraph (1) the Commission and the States shall establish alternative forms of regulation for Tier 1 telecommunications carriers that do not include regulation of the rate of return earned by such carrier ...").

¹⁷¹⁵ H.R. 1555, 104th Cong., 1st Sess. § 248(b) (1995) ("Abolition of Rate-of-Return Regulation—Notwithstanding any other provision of law, to the extent that a carrier has complied with sections 242 and 244 of this part, the Commission, with respect to rates for interstate or foreign communications, and State commissions, with respect to rates for intrastate communications, shall not require rate-of-return regulation.").

consistent with the approach we are adopting. The substantial weight of economic commentary in the record suggests that an "embedded cost"-based pricing methodology would be pro-competitor-in this case the incumbent LEC—rather than pro-competition. The We therefore decline to adopt embedded costs as the appropriate basis of setting prices for interconnection and access to unbundled elements. Rather, we reiterate that the prices for the interconnection and network elements critical to the development of a competitive local exchange should be based on the pro-competition, forward-looking, economic costs of those elements, which may be higher or lower than historical embedded costs. Such pricing policies will best ensure the efficient investment decisions and competitive entry contemplated by the 1996 Act, which should minimize the regulatory burdens and economic impact of our decisions on small entities. 2717

706. Incumbent LECs contend generally that, in order to ensure they will recover their total investment costs and earn a profit, they must recover embedded costs. These costs, they argue, were incurred under federal and regulatory oversight and therefore should be recoverable. We are not convinced by the incumbent LECs' principal arguments for recognizing embedded cost in setting section 251 pricing rules. Even if the incumbent LECs' contention is correct, increasing the rates for interconnection and unbun-

¹⁷¹⁶ See, e.g., Ad Hoc Telecommunications Users' Committee reply at Appendix A (Interconnection Pricing Standards for Monopoly Rate Elements in a Potentially Competitive Local Telecommunications Market), p.4; ALTS comments at Attachment B (Competitive Pricing of Interconnection, Unbundled Elements, and Collocation), pp. 28-29; AT&T reply at Appendix B (Reply Affidavit of William J. Baumol, Janusz A. Ordover, and Robert D. Willig), pp. 3-5; Competition Policy Institute comments at 18-19; DJ comments at 30-31.

¹⁷¹⁷ See Regulatory Flexibility Act, 5 U.S.C. §§ 601 et seq.

¹⁷¹⁸ See, e.g., Ameritech reply at 31; BellSouth comments at 57; Lincoln Tel. comments at 16-17.

dled elements offered to competitors would interfere with the development of efficient competition, and is not the proper remedy for any past under-depreciation. Moreover, contrary to assertions by some incumbent LECs, regulation does not and should not guarantee full recovery of their embedded costs. Such a guarantee would exceed the assurances that we or the states have provided in the past. 1710 We have considered the economic impact of precluding recovery of small incumbent LECs' embedded costs. 1720 We do not believe that basing the prices of interconnection and unbundled elements on an incumbent LEC's embedded costs would advance the pro-competitive goals of the statute. We also note that certain small incumbent LECs are not subject to our rules under section 251(f)(1) of the 1996 Act, unless otherwise determined by a state commission, and certain other small incumbent LECs may seek relief from their state commissions from our rules under section 251(f)(2) of the 1996 Act. 1721

have incurred certain embedded costs reasonably before the passage of the 1996 Act, based on different regulatory regimes. Some incumbent LECs may assert that they have made certain historical investments required by regulators that they have been denied a reasonable opportunity to recover in the past and that the incumbent LECs may no longer have a reasonable opportunity to recover in the new environment of the 1996 Act. The record before us, however, does not support the conclusion that significant residual embedded costs will necessarily result from the availability of network elements at economic costs. To the extent that any such residual consists of costs of meeting universal service obligations, the recovery of such costs can and should be considered in our ongoing universal service

¹⁷¹⁰ See In the Matter of the Applications of Pacific Bell, Order and Authorization, 10 FCC Red 12448, 12502-12503 (1995).

¹⁷²⁰ See Regulatory Flexibility Act, 5 U.S.C. §§ 601 et seq.

^{1721 47} U.S.C. § 251(f).

proceeding.¹⁷²² To the extent a significant residual exists within the interstate jurisdiction that does not fall within the ambit of section 254, we intend that to address that issue in our upcoming proceeding on access reform.

Rule. A number of incumbent LECs advocate using the "efficient component pricing rule" (ECPR) to set the prices that incumbent LECs charge new entrants for inputs required to produce the same retail services the incumbent produces. Under the ECPR, the price of an input should be equal to the incremental cost of the input plus the opportunity cost that the incumbent carrier incurs when the new entrant provides the services instead of the incumbent. The opportunity cost, which is computed as revenues less all incremental costs, represents both profit and contribution to common costs of the incumbent, given the existing retail prices of the services being sold.

709. We conclude that ECPR is an improper method for setting prices of interconnection and unbundled network elements because the existing retail prices that would be used to compute incremental opportunity costs under ECPR are not cost-based. Moreover, the ECPR does not provide any mechanism for moving prices towards competitive levels; it simply takes prices as given. The record indicates that both incumbents and new entrants agree that retail prices are not based on costs. Incumbents generally argue that local residential retail prices are below costs while new entrants contend that they exceed competitive levels. In either case, application of ECPR would result in input prices that would be either higher or lower than those which would be generated in a competitive market and would not lead to efficient retail pricing.

710. In markets where retail prices exceed competitive levels, entry would take place if network element prices

¹⁷²² See Universal Service NPRM at para. 32.

¹⁷²⁸ See, e.g., Ameritech comments at 62.

were set at efficient competitive levels. The ECPR, however, will serve to discourage competition in these very markets because it relies on the prevailing retail price in setting the price which new entrants pay the incumbent for inputs. While ECPR establishes conditions for efficient entry given existing retail prices, as its advocates contend, the ECPR provides no mechanism that will force retail prices to their competitive levels. We do not believe that Congress envisioned a pricing methodology for interconnection and network elements that would insulate incumbent LECs' retail prices from competition. Instead, Congress specifically determined that input prices should be based on costs because this would foster competition in the retail market. Therefore, we reject the use of ECPR for establishing prices for interconnection and unbundled elements.

711. As discussed above, the record in this docket shows that end user prices are not cost-based. In Open Video Systems, in contrast, we did not find that there would be a problem with the determination of end user prices. 1724 We concluded that "[u]se of [an ECPR] approach is appropriate in circumstances where the pricing is applicable [sic] to a new market entrant (the open video system operator) that will face competition from an existing incumbent provider (the incumbent cable operator) as opposed to circumstances where the pricing is used to establish a rate for an essential input service that is charged to a competing new entrant by an incumbent provider." 1728 In addition, in Open Video Systems, we concluded that the ECPR is appropriate because it encourages entry for open video system operators and also enhances the availability of carriage for unaffiliated programmers. 1726 The

of 1996—Open Video Systems, CS Docket No. 96-46, Second Report and Order, FCC 96-249 (rel. June 3, 1996) (Open Video Systems).

¹⁷²⁵ Id. at 127.

¹⁷²⁶ Id.

ECPR generally protects the provider's profits and provides opportunities for third parties to use the provider's inputs. The ECPR does not provide a mechanism to drive retail prices to competitive levels, however. In *Open Video Systems*, we wanted to encourage entry by open video system providers and to encourage them to have incentives to open their systems to unaffiliated programmers. Here, our goal is to ensure that competition between providers, including third party providers using interconnection and unbundled elements, will drive prices toward competitive levels and thus use of the ECPR is inappropriate.

712. Universal Service Subsidies. We conclude that funding for any universal service mechanisms adopted in the universal service proceeding may not be included in the rates for interconnection, network elements, and access to network elements that are arbitrated by the states under sections 251 and 252. Sections 254(d) and 254(e) of the 1996 Act mandate that universal service support be recovered in an equitable and nondiscriminatory manner from all providers of telecommunications services. 1727 We conclude that permitting states to include such costs in rates arbitrated under sections 251 and 252 would violate that requirement by requiring carriers to pay specified portions of such costs solely because they are purchasing services and elements under section 251. Section 252 (d)(1) requires that rates for interconnection, network elements, and access to network elements reflect the costs of providing those network elements, not the costs of supporting universal service.

713. Section 254(f) provides that a state may adopt equitable, nondiscriminatory, specific, and predictable mechanisms to advance universal service within that

¹⁷²⁷ Joint Explanatory Statement at 131 ("In keeping with the conferees' intent that universal service support should be clearly identified, [section 254(e)] states that such support should be made explicit...").

state. 1728 If a state collects universal service funding in rates for elements and services pursuant to sections 251 and 252, it will be imposing non-cost based charges in those rates. Including non-cost based charges in the rates for interconnection and unbundled elements is inconsistent with our rules implementing sections 251 and 252 which require that these rates be cost-based. It is also inconsistent with the requirement of section 254(f) that telecommunications carriers contribute to state universal service on a nondiscriminatory basis, because telecommunications carriers requesting interconnection or access to unbundled network elements will be required to make contributions to universal service support through such surcharges. 1729 States may not, therefore, include universal service support funding in the rates for elements and services pursuant to sections 251 and 252, nor may they implement mechanisms that have the same effect. For example, states may not fund universal service support by imposing higher rates for interconnection, unbundled elements, or transport and termination on carriers that offer service to different types of customers or different geographic areas. To the extent that New York's "pay or play" system funds universal service in this manner, it violates sections 251, 252, and 254 of the 1996 Act. Nothing in the 1996 Act or in this Order, however, precludes a state from adopting a universal service funding mechanism, whether interim or otherwise, if such funds are collected in accordance with section 254(f) on an "equitable and nondiscriminatory basis" through "specific, predictable, and sufficient mechanisms that do not rely on or burden Federal universal service support mechanisms." 1730

714. Our decision here does not exempt carriers purchasing elements or services under section 251 from con-

^{1728 47} U.S.C. § 254(f).

¹⁷²⁹ See infra, Section VII.D.3, discussing discrimination.

^{1780 47} U.S.C. § 254(f).

tributing to (or possibly receiving) universal service support. Rather, the recovery of universal service support costs from telecommunications carriers, including carriers requesting unbundled network elements, will be governed by section 254 of the 1996 Act. Federal universal service support mechanisms will be determined by our decisions reached in CC Docket 96-45, based on the recommendations of the Federal/State Universal Service Joint Board, and states may adopt additional universal service support mechanisms consistent with section 254(f).

- 715. We are mindful that the requirements of the 1996 Act may be disruptive to existing state universal service support mechanisms during the period commencing with this order continuing until we complete our universal service proceeding to implement section 254. As discussed in the subsection immediately below, we permit incumbent LECs to continue to recover certain noncost-based interstate access charge revenues for a limited period of time, largely because of concerns about possible deleterious impacts on universal service. We also authorize incumbent LECs, for a similar limited period of time, to continue to recover explicit intrastate universal service subsidy revenues based on intrastate access charges. This mechanism minimizes any possibility that implementation of sections 251 and 252 will unduly harm universal service during the interim period prior to completion of our universal service and access reform proceedings. Because we conclude this action should adequately provide for the continuation of a portion of existing subsidy flows during a transition period until completion of our proceeding implementing section 254, we decline to permit any additional funding of universal service support through rates for interconnection, unbundled elements, and transport and termination during the interim period.
- 716. Interim Application of Access Charges to Purchasers of Unbundled Local Switching Element. In the introduction of this Order, we emphasize that implementa-

tion of section 251 of the 1996 Act is integrally related to both universal service reform as required under section 254, and to reform of the interstate access charge system. 1731 In order to achieve pro-competitive, deregulatory markets for all telecommunications services, we must create a new system of funding universal service that is specific, explicit, predictable, sufficient, and competitively neutral. We also must move access charges to more costbased and economically efficient levels. We intend to fulfill both of these goals in the coming months, by completing our pending universal service proceeding to implement section 254 by our statutory deadline of May 1997, and by addressing access charge issues in an upcoming access reform proceeding. The 1996 Act, however, requires us to adopt rules implementing section 251 by August 1996. We are concerned that implementation of the requirements of section 251 now, without taking into account the effects of the new rules on our existing access charge and universal service regimes, may have significant, immediate, adverse effects that were neither intended nor foreseen by Congress.

717. Specifically, as we conclude above, the 1996 Act permits telecommunications carriers that purchase access to unbundled network elements from incumbent LECs to use those elements to provide telecommunications services, including the origination and termination of interstate calls. Without further action on our part, section 251 would allow entrants to use those unbundled network facilities to provide access services to customers they win from incumbent LECs, without having to pay access charges to the incumbent LECs. This result would be consistent with the long term outcome in a competitive market. In the short term, however, while other aspects of our regulatory regime are in the process of being reformed, such a change may have detrimental consequences.

¹⁷³¹ See supra, Section I.B.

718. The access charge system includes non-cost-based components and elements that at least in part may represent subsidies, such as the carrier common line charge (CCLC) and the transport interconnection charge (TIC). The CCLC recovers part of the allocated interstate costs for incumbent LECs to provide local loops to end users. In the universal service NPRM, we observed that the CCLC may result in higher-volume toll users paying rates that exceed cost, and some customers paying rates that are below cost. We sought comment on whether that subsidy should be continued, and on whether and how it should be restructured.1782 The nature of me 4 of the revenues recovered through the TIC is unclear and subject to dispute, although a portion of the TIC is associated with certain costs related to particular transport facilities. Although the TIC was not created to subsidize local rates. some parties have argued in the Transport proceeding and elsewhere that some portion of the revenues now recovered through the TIC may be misallocated local loop or intrastate costs that operate to support universal service. 1783 In the forthcoming access reform proceeding, we intend to consider the appropriate disposition of the TIC, including the development of cost-based transport rates as directed by the United States Court of Appeals for the District of Columbia Circuit in Competitive Telecommunications Association v. FCC (CompTel v. FCC). 1784

¹⁷⁸² Universal Service NPRM at paras. 113-14.

¹⁷⁸⁸ Transport Rate Structure and Pricing, CC Docket No. 91-213, Report and Order and Further Notice of Proposed Rulemaking, 7 FCC Red 7006, 7065-7066 (1992) (First Transport Order). Cf. Letter from Bruce K. Cox, Government Affairs Director, AT&T, to William F. Caton, Acting Secretary, FCC, September 7, 1995 (filed in CC Docket No. 91-213) (suggesting that TIC revenues not allocable to specific transport facilities may represent misallocated common line costs).

¹⁷³⁴ Competitive Telecommunications Association v. FCC, No. 96-1168 (D.C. Cir. July 5, 1996).

- 719. Without a temporary mechanism such as the one we adopt below, the implementation of section 251 would permit competitive local service providers that also provide interstate long-distance service to avoid totally the CCLC and the TIC, which in part represent contributions toward universal service, by serving their local customers solely through the use of unbundled network elements rather than through resale. We believe that allowing such a result before we have reformed our universal service and access charge regimes would be undesirable as a matter of both economics and policy, because carrier decisions about how to interconnect with incumbent LECs would be driven by regulatory distortions in our access charge rules and our universal service scheme, rather than the unfettered operation of a competitive market. Because of our desire to err on the side of caution where universal service may be implicated, we conclude that some action is needed during the interim period before we complete our access reform and universal service proceedings.
- 720. We conclude that we should establish a temporary mechanism to help complete all of the steps toward the pro-competitive goal of the 1996 Act, including the implementation of a new, competitively-neutral system to fund universal service and a comprehensive review of our system of interstate access charges. Therefore, for a limited period of time, incumbent LECs may recover from interconnecting carriers the CCLC and a charge equal to 75 percent of the TIC for all interstate minutes traversing the incumbent LECs' local switches for which the interconnecting carriers pay unbundled local switching element charges. Incumbent LECs may recover these charges only until the earliest of: (1) June 30, 1997; (2) the effective date of final decisions by the Commission in both the universal service and access reform proceedings; or (3) if the incumbent LEC is a BOC, the date on which that BOC is authorized under section 271 of the 1996 Act to offer in-region interLATA service. The end date for

BOCs that are authorized to offer interLATA service shall apply only to the recovery of access charges in those states in which the BOC is authorized to offer such service.

721. We tentatively concluded in the NPRM that purchasers of unbundled network elements should not be required to pay access charges. We reaffirm our conclusion above in our discussion of unbundled network elements that nothing on the face of sections 251(c)(3) and 252(d)(1) compels telecommunications carriers that use unbundled elements to pay these charges, nor limits these carriers' ability to use unbundled elements to originate or terminate interstate calls, and that payment of rates based on TELRIC plus a reasonable allocation of common costs, pursuant to section 251(d)(1), represents full compensation to the incumbent LEC for use of the network elements that telecommunications carriers purchase. Because of the unique situation described in the preceding paragraphs, however, we conclude, contrary to our proposal in the NPRM, that during a time-limited period. interconnecting carriers should not be able to use unbundled elements to avoid access charges in all cases. As detailed below, this temporary mechanism will apply only to carriers that purchase the local switch as an unbundled network element, and use that element to originate or terminate interstate traffic.1785 We are applying these transitional charges to the unbundled local switching element, rather than to any other network elements, because such an approach is most closely analogous to the nanner in which the CCLC and TIC are recovered in the nterstate access regime. Currently, the CCLC and TIC apply to interstate switched access minutes that traverse incumbent LECs' local switches. Applying the CCLC and

¹⁷⁸⁵ As discussed infra, carriers that choose to enter a local market through resale of an incumbent LEC's intrastate local exchange service will pay interstate and intrastate access charges to originate and terminate toll traffic for end user customers that purchase that resold local exchange service.

75 percent of the TIC to the unbundled local switching element is consistent with our goal of minimizing disruptions while we reform our universal service system and consider changes to our access charge mechanisms. Moreover, the CCLC and the TIC are recovered on a perminute basis, and the local switch is the primary point at which incumbent LECs are capable of recording interstate minutes for traffic associated with end user customers of requesting carriers.

- 722. We have crafted this short-term continuation of certain access charge revenue flows to minimize the possibility that incumbent LECs will be able to "double recover" through access charges the facility costs that new entrants have already paid to purchase unbundled elements. For that reason, we do not permit incumbent LECs to assess on purchasers of the unbundled local switching element any interstate access charges other than the CCLC and 75 percent of the TIC. The other access charges are all designed to recover the cost of particular facilities involved in the provision of interstate access services, such as local switching, dedicated interoffice transport circuits, and tandem switching. Imposition of these facility-based access charges in addition to the cost-based charges for comparable network elements established under Section 252 could result in double recovery. The mechanism we establish will ensure that incentives created by non-cost-based elements of access charges do not result in harmful consequences prior to completion of access reform and our universal service proceeding. Imposition of additional access charges is therefore not necessary. We note that this mechanism serves to minimize the potentially disruptive effects of our decisions on incumbent LECs, including small incumbent LECs. 1786
- 723. For the same reason, we permit incumbent LECs to recover only 75 percent of the TIC. Some portion of

¹⁷³⁶ See Regulatory Flexibility Act, 5 U.S.C. §§ 601 et seq.

the TIC recovers revenues associated with specific transport facilities. To the extent that these costs can be identified clearly, they should not be imposed on new entrants through the TIC. Incumbent LECs will be fully compensated for any transport facilities that new entrants purchase from them through the unbundled element rates states establish under 252(d)(1), which, as we have stated, must be based on economic cost rather than access charges. In our interim transport rate restructuring, we explicitly set the initial tandem switching rate at 20 percent of the interstate revenue requirement, with the remainder included in the TIC.1787 In addition. certain costs of upgrading incumbent LEC networks to support SS7 signaling were allocated to transport through then-existing separations procedures. In our interim transport rate restructuring, we did not create any facilitybased charges to recover these costs, 1738 so the associated revenues presumably were incorporated into the TIC. There may also be other revenues associated with transport facilities that are recovered today through the TIC. While we are uncertain of the precise magnitude of these revenues, in our best judgment, based on the record in the Transport proceeding and other information before us, we find that it is likely that these revenues approach, but probably do not exceed 25 percent of the TIC for most incumbent LECs. Thus, we believe that 25 percent is a conservative amount to exclude from the TIC to ensure that incumbent LECs do not double recover revenues associated with transport facilities from new entrants. Moreover, the Court in CompTel v. FCC remanded our Transport decision, in part, because of the inclusion of tandem switching revenues in the TIC rather than in the rate element for tandem switching. We find that excluding 25 percent of the TIC represents a reasonable exercise of our discretion to prevent revenues associated with the tandem

¹⁷³⁷ First Transport Order, 7 FCC Red at 7019.

¹⁷³⁸ First Transport Order, 7 FCC Red at 7019.

switching revenue requirement from being recovered from purchasers or unbundled local switching.

- 724. We strongly emphasize that these charges will apply to purchasers of the unbundled switching element only for a very limited period, to avoid the possible harms that might arise if we were to ignore the effects on access charges and universal service of implementation of section 251. BOCs shall not be permitted to recover these revenues once they are authorized to offer in-region inter-LATA service, because at that time the potential loss of access charge revenues faced by a BOC most likely will be able to be offset by new revenues from interLATA services. Moreover, although we do not prejudge the conditions necessary to grant BOC petitions under section 271 to offer in-region interLATA service, we do decide that BOCs should not be able to charge the CCLC and the TIC, which are not based on forward-looking economic costs, to competitors that use unbundled elements under section 251 once they are authorized to provide in-region interLATA service. Only BOCs are subject to special restrictions in the 1996 Act to ensure that their entry into the in-region interLATA market does not have an adverse impact on competition. We conclude that this additional trigger date after which BOCs may not continue to receive access charges from purchasers of unbundled local switching is consistent with this Congressional design.
- 725. We have selected June 30, 1997 as an ultimate end date for this transitional mechanism to coincide with the effective date for LEC annual access tariffs, and because we believe it is imperative that this transitional requirement be limited in duration. We can conceive of no circumstances under which the requirement hat certain entrants pay the CCLC or a portion of the TIC on calls carried over unbundled network elements would be extended further. The fact that access or universal service reform have not been completed by that date would not

be a sufficient justification, nor would any actual or asserted harm to the financial status of the incumbent LECs. By June 30, 1997, the industry will have had sufficient time to plan for and adjust to potential revenue shifts that may result from competitive entry. Thus, the economic impact of our decision on competitive local service providers, including those that are small entities, should be minimized.¹⁷⁸⁹

726. We believe that we have ample legal authority to implement this temporary transitional measure, and we find that this approach is consistent with the letter and spirit of the 1996 Act. We recognize that the CCLC and TIC have not been developed in accordance with the pricing standards of section 252(d)(1), and that to comply with the 1996 Act, the rates that states establish for interconnection and unbundled network elements may not include non-cost-based amounts or subsidies. The 1934 and 1996 Acts do, however, give us legal authority to determine, for policy reasons, that users of LEC facilities should pay certain access charges for a period of time. 1740 Section 4(i) of the 1934 Act authorizes the Commission to "perform any and all acts . . . not inconsistent with this Act, as may be necessary in the execution of its functions." 1741 Given the extraordinary upheaval in the industry's structure set in motion by the 1996 Act, and the specific concerns described above, we believe that a temporary mechanism is necessary in order to ensure that the policy goals underlying the access charge system and the Communications Act itself are not undermined. Further, we believe section 251(g) of the 1996 Act lends support to our decision. As discussed above, section 251(g)

¹⁷⁸⁰ See Regulatory Flexibility Act, 5 U.S.C. §§ 601 et seq.

¹⁷⁴⁰ See, e.g., New England Tel. and Tel. Co. v. FCC, 826 F.2d 1101 (D.C. Cir. 1987); North American Telecommunications Association v. FCC, 772 F.2d 1282 (7th Cir. 1985); Lincoln Tel. and Tel. Co. v. FCC, 659 F.2d 1092 (D.C. Cir. 1981).

^{1741 47} U.S.C. § 4(i).

does not require that incumbent LECs continue to receive access charge revenues when telecommunications carriers use unbundled incumbent LEC network elements to originate and terminate interstate traffic. That section does, however, provide evidence of Congressional recognition of the potential tension between existing interconnection obligations, such as access charges, and the new methods of interconnection mandated by section 251, and therefore supports our decision to create a limited-duration mechanism to address this tension.

727. The decision of the court in CompTel v. FCC to remand our decision to adopt the TIC is not inconsistent with this approach. The Court's concern stemmed, in part, from the inclusion of a portion of the interstate tandem switching revenue requirement in the TIC. We have excluded from the charges that purchasers of unbundled local switching must pay a percentage of the TIC that, at a minimum, includes these allocated tandem switching revenues from the transitional charges that incumbent LECs may assess on IXCs.1742 Furthermore, the Court directed the Commission to develop a cost-based transport rate structure, or to explain why it chose not to do so. 1743 We intend to fulfill this obligation in the forthcoming access reform proceeding. The charge equal to 75 percent of the TIC will be applied only as an interim measure for a brief, clearly-identified period, until that restrucuring of access charges is completed. The court expressly acknowledged that the 1996 Act would have implications for the access charge system.1744 For the rea-

¹⁷⁴² As discussed above, we estimate that the tandem switching, SS7, and other costs associated with transport facilities now recovered through the TIC likely do not exceed 25% of the TIC for most incumbent LECs.

¹⁷⁴³ Competitive Telecommunications Association v. FCC, No. 96-1168 at 26-27.

¹⁷⁴⁴ Id. at 12-13.

sons described above, we conclude that these effects necessitate temporary application of a portion of the TIC to entrants that win end user customers from LECs, and that puchase the local switch as an unbundled element to originate and terminate interstate and intrastate toll traffic for such end users. In the access reform proceeding, we intend to determine the appropriate disposition for these revenues. Until we have had the opportunity to do so, however, we permit incumbent LECs to recover a transitional charge equal to 75 percent of the TIC under the limited circumstances described herein.

728. The interim mechanism we establish here differs from the waiver relief we have previously granted to NYNEX and Ameritech to permit them to recover certain interstate access charge revenues through "bulk billing" of revenues to all interstate switched access customers. 1748 Those orders responded to waiver requests filed prior to the passage of the 1996 Act. Our responsibility in those proceedings was to determine whether special circumstances existed, and whether the specific relief requested better served the public interest than continued application of our general rules. By contrast, the action we take today addresses industry-wide issues that arise from the new regime put into place by section 251 of the 1996 Act, which allows states to establish unbundled network element rates that recover the full unseparated cost of elements. Our response to the Ameritech and NYNEX waiver petitions does not, simply because those petitions also concerned access charge recovery, constrain our decision in this proceeding.

¹⁷⁴⁶ See The NYNEX Tel. Cos. Petition for Waiver, Transition Plan to Preserve Universal Service in a Competitive Environment, Memorandum Opinion and Order, 10 FCC Rcd 7445 (1995), reconsideration pending (NYNEX USPP Order); Ameritech Operating Companies Petition for a Declaratory Ruling and Related Waivers to Establish a New Regulatory Model for the Ameritech Region, Order, FCC 96-58 (released Feb. 15, 1996) (Ameritech Customers First Order).

- 729. It would be unreasonable to provide such a transitional mechanism on the federal level, but to deny similar authority to the states. Therefore, states may continue existing explicit universal service support mechanisms based on intrastate access charges for an interim period of a similar brief, clearly-defined length. During that period, unless decided otherwise by the state, incumbent LECs may continue to recover such revenues from purchasers of unbundled local switching elements that use those elements to originate or terminate intrastate toll calls for end user customers they win from incumbent LECs. States may terminate these mechanisms at any time. We define mechanisms based on intrastate access charges as those mechanisms that require purchasers of intrastate access services from incumbent LECs to pay non-cost-based charges for those access services on the basis of their intrastate access minutes of use.
- 730. We do not intend, however, that such a transitional mechanism eviscerate the requirements of sections 252 and 254, which, as we have stated, prohibit funding of universal service subsidies through rates for interconnection and unbundled network elements. Mechanisms such as New York's "pay or play" system, which would impose intrastate access charges on non-access services rather than allowing incumbent LECs to recover non-cost-based revenues from purchasers of access services, may not be included in this interim system. Such a result is justified because state "pay or play" mechanisms do not at present constitute a significant revenue stream to incumbent LECs, and therefore elimination of this mechanism is unlikely, in the short term, to have significant detrimental effects on universal service support.
- 731. These state mechanisms must end on the earlier of: (1) June 30, 1997; or (2) if the incumbent LEC that receives the transitional access charge revenues is a BOC, the date on which that BOC is authorized under

section 271 of the 1996 Act to offer in-region interLATA service. With one exception, the analysis provided above as to the rationale for the end dates for the transitional interstate access charge mechanism applies here as well. Because our access reform proceeding focuses on federal charges, and because the full extent of the section 254 universal service mechanism remains to be determined in that proceeding, intrastate access charge-based universal service support mechanisms should not now be required to terminate upon the completion of those proceedings.

732. As with our decision to permit incumbent LECs to continue to receive certain interstate access charge revenues from some purchasers of unbundled local switching for a limited period of time, we believe our decision to allow states to preserve certain intrastate universal service support mechanisms based on access charges is within our authority under section 251(d)(1) of the 1996 Act, and section 4(i) of the 1934 Act. Moreover, although section 251(g) does not directly refer to intrastate access charge mechanisms, it would be incongruous to conclude that Congress was concerned about the effects of potential disruption to the interstate access charge system, but had no such concerns about the effects on analogous intrastate mechanisms.

(c) Fifth Amendment Issues

733. We conclude that our decision that prices for incumbent LECs' unbundled elements and interconnection offerings be based on forward-looking economic cost does not violate the incumbent LECs' rights under the Fifth Amendment of the Constituton. The Supreme Court has recognized that public utilities owned and operated by private investors, even though their assets are employed in the public interest to provide consumers with service, may assert their rights under the Takings Clause of the

Fifth Amendment.¹⁷⁴⁶ In applying the Takings Clause to rate setting for public utilities, the Court has stated that "[t]he guiding principle has been that the Constitution protects utilities from being limited to a charge for their property serving the public which is so 'unjust' as to be confiscatory." ¹⁷⁴⁷

734. The Supreme Court has held that the determination of whether a rate is confiscatory depends on whether that rate is just and reasonable, and not on what methodology is used. In Federal Power Comm'n v. Hope Natural Gas Co., the Court upheld the Federal Power Commission's order that required the company to make a large reduction in wholesale gas rates. The commission based its determination of a reasonable rate of return on a plant valuation determined by using a historical cost methodology that was only half as large as the company's own valuation based on forward-looking reproduction costs. In its decision, the Court set forth the governing legal standard for determining whether a rate is constitutional:

Under the statutory standard of "just and reasonable" it is the result reached not the method employed that is controlling. It is not the theory but the impact of the rate order which counts. If the total effect of the rate order cannot be said to be unjust and unreasonable, judicial inquiry under the Act is at an

¹⁷⁴⁶ The Fifth Amendment provides that, "private property [shall not] be taken for public use, without just compensation." U.S. Const. amend. V. See Duquesne Light Co. v. Barasch, 488 U.S. 299, 307 (1989) (Duquesne).

¹⁷⁴⁷ Duquesne, 488 U.S. at 307 (citing Covington & Lexington Turnpike Road Co. v. Sandford, 164 U.S. 578, 597 (1896)).

¹⁷⁴⁸ Hope Natural Gas, 320 U.S. at 602-603; see also Duquesne; In re Permian Basin Area Rate Cases, 390 U.S. 747 (1968); Federal Power Commission v. Memphis Light, Gas & Water Division, 411 U.S. 458 (1973); Jersey Central Power & Light v. FERC, 810 F.2d 1168 (D.C. Cir. 1987).

end. The fact that the method employed to reach that result may contain infirmities is not then important. 1740

735. The Court went on to explain that, in determining whether a rate is reasonable, the regulatory body must balance the interests of both the investor and consumer. The From the investor or company point of view, it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. . . . [T]he return on the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks." 1761

736. Under sections 251(c)(2) and (3) of the 1996 Act, incumbent LECs must establish rates for interconnection and unbundled elements that are just and reasonable.1782 In adopting the rules that govern those rates, under Hope Natural Gas we must consider whether the end result of incumbent LEC rates is just and reasonable. Incumbent LECs argue that establishing a rate structure that does not permit recovery of historical or embedded costs is confiscatory. We disagree. As stated above, the Court has consistently held since Hope Natural Gas that it is the end result, not the method used to achieve that result, that is the issue to be addressed. 1788 Indeed, the Court has found that the "fixing of prices, like other applications of the police power, may reduce the value of the property which is being regulated. But the fact that the value is reduced does not mean that the regulation is in-

¹⁷⁴⁹ Hope Natural Gas, 320 U.S. at 602.

¹⁷⁸⁰ Id.

¹⁷⁸¹ Id. at 603.

^{1782 47} U.S.C. § 251(e)(2) and (3).

¹⁷⁵³ See, e.g., Duquesne, 488 U.S. at 310; Hope Natural Gas, 320 U.S. at 602.

valid." ¹⁷⁵⁴ Moreover, the Court has upheld as reasonable changes in ratemaking methodology when the change resulted in the exclusion of historical costs prudently incurred. ¹⁷⁵⁵ Thus, the mere fact that an incumbent LEC may not be able to set rates that will allow it to recover a particular cost incurred in establishing its regulated network does not, in and of itself, result in confiscation.

- 737. Moreover, *Hope Natural Gas* requires only that the end result of our overall regulatory framework provides LECs a reasonable opportunity to recover a return on their investment. In other words, incumbent LECs' overall rates must be considered, including the revenues for other services under our jurisdiction.¹⁷⁶⁶
- 738. In this proceeding, we are establishing rules that should produce rates for monopoly elements and services that approximate what the incumbent LECs would be able to charge if there were a competitive market for such offerings. We believe that a forward-looking economic cost methodology enables incumbent LECs to recover a fair return on their investment, i.e., just and reasonable rates. The record does not compel a contrary conclusion. No incumbent LEC has provided persuasive evidence that prices based on a forward-looking economic cost methodology would have a significant impact on its "financial integrity." We further note that at least one federal appellate court has held incremental cost-based pricing constitutional.¹⁷⁸⁷
- 739. Incumbent LECs may seek relief from the Commission's pricing methodology if they provide specific

¹⁷⁸⁴ Hope Natural Gas, 320 U.S. at 601.

¹⁷⁸⁵ Duquesne, 488 U.S. at 301-302.

¹⁷⁸⁶ However, we may not consider incumbent LECs' revenue derived from services not under our jurisdiction. Smith v. Ill. Bell, 282 U.S. 133 (1930).

sion, 792 F.2d 287, 297 (2d Cir.), cert. denied, 479 U.S. 1017 (1986).

information to show that the pricing methodology, as applied to them, will result in confiscatory rates. We also do not completely foreclose the possibility that incumbent LECs will be afforded an opportunity to recover, to some extent, their embedded costs through a mechanism separate from rates for interconnection and unbundled network elements. As stated above, we intend to explore this issue in detail in our upcoming access reform proceeding.

740. GTE argues that the proper standard to review our ratemaking methodology is the just compensation standard generally reserved for takings of property. This is in effect a contention that the 1996 Act's physical collocation and unbundled network facility requirements constitute physical occupation of their property that should be deemed a taking and that must be subject to "just compensation." Assuming for the sake of argument that the physical collocation and unbundled facilities requirements do result in a taking, we nevertheless find that the ratemaking methodology we have adopted satisfies the just compensation standard. Just compensation is normally measured by the fair market value of the property subject to the taking.1758 Just compensation is not, however, intended to permit recovery of monopoly rents. 1759 The just and reasonable rate standard of TELRIC plus a reasonable allocation of the joint and common costs of providing network elements that we are adopting attempts to replicate, with respect to bottleneck monopoly elements, the rates

¹⁷⁵⁸ See, e.g., United States v. Miller, 317 U.S. 369, 374 (1943) (holding that just compensation can readily be set by ascertaining the property's fair market value, i.e., "what a willing buyer would pay in cash to a willing seller").

¹⁷⁵⁰ See, e.g., Lord Mfg. Co. v. United States, 84 F.Supp. 748, 755-56 (Ct.Cl. 1949), citing United States v. Cors, 337 U.S. 325, 334 (1949).

that would be charged in a competitive market, 1760 and, we believe, is entirely consistent with the just compensation standard. Indeed, a similar rate methodology based on incremental costs has been found to satisfy the just compensation requirement. 1761 For these reasons, we conclude that, even if the 1996 Act's physical collocation and unbundled network facility requirements constitute a taking, a forward-looking economic cost methodology satisfies the Constitution's just compensation standard.

(3) Discussion

743. We conclude, as a general rule, that incumbent LECs' rates for interconnection and unbundled elements must recover costs in a manner that reflects the way they are incurred. This will conform to the 1996 Act's requirement that rates be cost-based, ensure requesting carriers have the right incentives to construct and use public network facilities efficiently, and prevent incumbent LECs from inefficiently raising costs in order to deter entry. We note that this conclusion should facilitate competition on a reasonable and efficient basis by all firms in the industry by establishing prices for interconnection and unbundled elements based on costs similar to those incurred by the incumbents, which may be expected to reduce the regulatory burdens and economic impact of our decision for many parties, including both small entities seeking to enter the local exchange markets and small incumbent LECs. 1768 We also adopt some more specific rules that follow from this general rule.

¹⁷⁶⁰ Compare Policy and Rules Concerning Rates for Dominant Carriers, Further Notice of Proposed Rulemaking, CC Docket No. 87-313, 3 FCC Rcd 3195, 3200-01 (1988).

¹⁷⁶¹ Metropolitan Transp. Auth. v. Interstate Commerce Commission, 792 F.2d at 297.

¹⁷⁶⁸ See Regulatory Flexibility Act, 5 U.S.C. §§ 601 et seq.

C. Default Proxy Ceilings and Ranges

- 767. As previously discussed, we strongly encourage state commissions, as a general rule, to set arbitrated rates for interconnection and access to unbundled network elements pursuant to the forward-looking, economic cost pricing methodology we adopt in this Order. Such rates would approximate levels charged in a competitive market, would be economically efficient, and would be based on the forward-looking, economic cost of providing interconnection and unbundled elements. We recognize, however, that in some cases, it may not be possible for carries to prepare, or the state commission to review, economic cost studies within the statutory time frame for arbitration and thus here first address situations in which a state has not approved a cost study. States that do not complete their review of a forward-looking economic cost study within the statutory time periods but must render pricing decisions, will be able to establish interim arbitrated rates based on the proxies we provide in this Order. A proxy approach might provide a faster, administratively simpler, and less costly approach to establishing prices on an interim basis than a detailed forward-looking cost study.
- 768. The default proxies we establish will, in most cases, serve as presumptive ceilings. States may set prices below those ceilings if the record before them supports a lower price. States should provide a reasoned basis for selecting a particular default price. In one case, for local switching, the default proxy is a range within which a state may set prices.

2. Proxies for Specific Elements

a. Overview

787. Although we encourage states to use an economic cost methodology to set rates for interconnection, unbundled network elements, and collocation, we will permit

states unable to analyze an economic costing study within the statutory time constraints to use default proxies in setting and reviewing rates. We set forth below the default proxies for specific network elements. These proxies are interim only. They will apply only until a state sets rates in arbitrations on the basis of an economic cost study, or until we promulgate new proxies based on economic cost models. We also set forth below the rate structure rules that apply to each of network elements. These rate structure requirements are applicable regardless of whether a state uses an economic cost study or the proxy approach to set rate levels.

792. We are adopting a proxy ceiling based on two cost models and rates for unbundled loops allowed by six states that had available to them the results of forward-looking economic cost studies at the time they considered either interim or permanent rates for the unbundled loop element. These states are Colorado, Connecticut, Florida, Illinois, Michigan, and Oregon. Each of these states has used a standard that appears to be reasonably close to the forward-looking economic cost methodology that we require to be used, although possibly not consistent in every detail with our TELRIC methodology. Generally, these

¹⁸⁶⁰ See infra, Section VII.C.3., discussing generic cost models.

¹⁸⁶⁷ See In re: U S West Communications, Inc. Filing of Advice Letter No. 2610 In Compliance with Commission Decision No. C96-521 Adopting Emergency Rules (Tariff), Docket No. 96S-233T, Decision No. C96-655 (Colorado Commission, June 21, 1996) ["Colorado Decision"] at 58-64 (interim unbundled loop prices set after review of TSLRIC cost studies); Re Southern New England Telephone Company, Order No. 95-06-17, 1995 WL 803837 (Conn. D.P.U.C., December 20, 1995) ["Connecticut Decision"] at 9-10, 72 (same); In re: application of City Signal, Inc., for an order establishing and approving interconnection arrangements with Ameritech Michigan, Case No. U-10647 (Michigan Commission, February 23, 1995) ["Michigan Decision"] at 32, 56-57 (setting interim unbundled loop rates based on estimated TSLRIC costs); In re: Resolution of petition(s) to establish nondiscriminatory rates, terms and

states appear to have included an allocation of forward-looking common costs in their unbundled loop prices. The individual state studies resulted in the following average rates for unbundled local loops: Colorado, \$18; Connecticut, \$12.95; Florida, \$17.28; Illinois, \$10.93; Michigan, \$10.03; and Oregon, \$12.45, computed as set forth below.

793. The Colorado Commission set an interim rate of \$18 per month for unbundled loops terminated at the main distribution frame of the LEC switch. The Connecticut Commission ruled that SNET must provide the following interim unbundled loop prices varying by four zones: metro \$10.18; urban \$11.33; suburban \$15.33; and rural \$14.97. In the absence of further information about customer density or average loop length by zone, we used a simple average equal to \$12.95. The Florida Commis-

conditions for resale involving local exchange companies and alternative local exchange companies and alternative local exchanges companies pursuant to Section 364.161, Florida Statutes, Docket No. 950984-TP, Order No. PSC-96-0444-FOF-TP, (Florida Commission, March 29, 1996) ["Florida Decision I"] at 16 (interim unbundled loop prices set with reference to BellSouth cost studies): In Re: Resolution of petition(s) to establish nondiscriminatory rates, terms and conditions for resale involving local exchange companies and alternative local exchange companies and alternative local exchanges companies pursuant to Section 364.161. Florida Statutes, Docket No. 950981-TP, Order No. PSC-96-0811-FOF-TP (Florida Commission, June 24, 1996) ["Florida Decision II"] at 25-26 (setting rates after review of GTE and United/Centel cost studies); In re: Investigation into the Cost of Providing Telecommunications Service, Order No. 96-188, (Oregon Commission, July 19, 1996) ["Oregon Decision"] at 78 n.61 (interim unbundled loop prices generally based on LRIC estimates plus applicable group related costs, and an additional contribution for recovery of joint and common costs); Illinois Bell Telephone Company Proposed introduction of a trial of Ameritech's Customers First Plan in Illinois Docket Nos. 94-0096/94-0117/94-0146]94-0301 (Illinois Commission, April 7, 1995) ["Customers First Order"] at 54, 61 (rates set with reference to Ameritech's LRSIC studies).

¹⁸⁶⁸ Colorado Decision at 66.

¹⁸⁶⁹ Connecticut Decision at 74.

sion set an interim rate for 2-wire loops at \$17.00 per month for BellSouth, \$15.00 for United/Centel, and \$20.00 for GTE. 1870 Using weights equal to the number of loops served by each company in 1994 as reported in the Monitoring Report. 1871 we computed a weighted average price equal to \$17.28. Pursuant to its Customers First Order, the Illinois Commerce Commission approved tariffs establishing business rates equal to \$7.08, \$10.92, and \$14.45, and residential rates equal to \$4.59, \$8.67, and \$12.14 in three density zones. 1872 Based on data from Table 2.5, page 20 of the Common Carrier Statistics, 1995 Preliminary, we found a 36 percent-64 percent business residential split. Using Illinois Commission data for number of households in each density zone (996,750 in zone A; 2,788,759 in zone B; 4,594,567 in zone C), we computed an average loop cost of \$10.93. The Michigan Commission approved transitional rates of \$8.00 per loop for business and \$11 per loop for residence. 1878 Based on Common Carrier Statistics, 1995 Preliminary data, we computed a 32 percent-68 percent business-residential split in Michigan, which leads to an average rate of \$10.03. The Oregon Commission set the rate for a "basic 2-wire loop set" at \$11.95 plus \$0.50 for a network access channel connection, for a total price of \$12.45.1874

794. In order to set a proxy ceiling for unbundled loop elements we make use of the two cost models for which nationwide data are available and upon which parties have had the opportunity to comment in this proceeding. These

¹⁸⁷⁶ Florida Decision I at 19; Florida Decision II at 25-26.

¹⁸⁷¹ Monitoring Report, CC Docket No. 87-339, May 1996 (listing the following number of loops by company: GTE, 1,909,172; United/Centel, 1,627,314; BellSouth, 5,328,280).

¹⁸⁷² See Ameritech Tariff, Ill. C.C. No. 20, Part 19, Section 1, issued October 23, 1995.

¹⁸⁷³ Michigan Decision at 94.

¹⁸⁷⁴ Oregon Decision at Appendix C, p.1.

models are the Benchmark Cost Model (BCM)1878 and the Hatfield 2.2.1876 Based on our current information, we believe that both these models are based on detailed engineering and demographic assumptions that vary among states, and that the outputs of these models represent sufficiently reasonable predictions of relative cost differences among states to be used as set forth below to set a proxy ceiling on unbundled loop prices for each state. We do not believe, however, that these model outputs by themselves necessarily represent accurate estimates of the absolute magnitude of loop costs. As we discuss below, further analysis is necessary in order to evaluate fully the procedures and input assumptions that the models use in order to derive cost estimates. Furthermore, in the case of BCM, model outputs include costs in addition to the cost of the local loop. In order to correct for these considerations, we have developed a hybrid cost proxy in the following manner. First, we have applied a scaling factor to the cost estimates of each model. This scaling is based on the actual rates computed for unbundled loop elements in the six states referred to above. Specifically we have multiplied the cost estimate produced by each model in each state by a factor equal to the unweighted average of rates adopted by state commissions in the six states, divided by the unweighted average of the model cost estimates for the same six states. Our hybrid cost proxy is computed as the simple average of the scaled cost estimates for the

munications, Inc., NYNEX Corporation, Sprint Corporation, U S West, Inc. (December 1995), submitted by MCI Communications, Inc., NYNEX Corp., Sprint/United Management Corp., U S West, Inc. on July 24, 1996 (BCM). For a more detailed discussion of the BCM, see infra, Section VII.C.3.

Inc., March 1996), submitted by AT&T and MCI on May 16, 1996 (Hatfield 2.2); see also AT&T reply at Appendix D (Update of the Hatfield Model Version 2.2, Release 1). See infra, Section VII.C.3., for a more detailed discussion of the various versions of the Hatfield model.

two models in each of the 48 contiguous states and the District of Columbia. Neither BCM nor Hatfield 2.2 provide cost estimates for Alaska and only the BCM provides an estimate for Hawaii. Our default loop cost proxies for Hawaii and Puerto Rico are based on the default loop cost proxies of the states that most closely approximate them in population density per square mile.1877 We are not setting default loop cost proxies in this Order for Alaska or for any of the remaining non-contiguous areas subject to the 1996 Act requirement that incumbent LECs offer unbundled loop elements. We are not establishing default loop cost proxies for these areas because we are unsure that comparisons of the population densities of the continental states and of Alaska and other non-contiguous areas subject to the 1996 Act fully capture differences in loop costs. Regulatory authorities in those areas may seek assistance from this Commission should default loop cost proxies be needed before they have completed their investigations of the forward-looking costs of providing unbundled loop elements. Since our intention is to establish a ceiling for unbundled loop rates, we believe that it is necessary to take account of the variation in the data that we have used for scaling. While the six states that we considered appear to have based their rates on forwardlooking economic cost pricing principles, the actual rates that they approved appear to reflect other factors as well. Furthermore, because only a small number of states have conducted such studies, some upward adjustment is warranted as a safety margin to ensure that the ceiling captures the variation in forward-looking economic costing prices on a state-by-state basis. We have therefore chosen to adjust the hybrid cost estimates upward by five percent

density and the loop costs reported by all the cost models. The correlation is significant at the 5% level. Population densities are from The Statistical Abstract of the United States 1995, Table Number 23. For Puerto Rico, land area is from Table 361 and population is from Table 1345.

for each state. A table listing the proxy ceilings on a statewide average basis is contained in Appendix D.

795. A number of parties have opposed the use of either the Hatfield model or BCM.1818 Some critics, for example, have argued that the models may lead to inaccurate cost estimates since these estimates assume that a network is built "from scratch." 1879 Others have criticized specific procedures that have been used in the models to estimate both operating expenses and capital costs. As discussed below in Section VII.C.3., we believe that these criticisms may have merit. In a future rulemaking proceeding, we intend to examine in greater detail various forward looking economic cost models. For the purposes of setting an interim proxy, however, we note that the criticisms have been directed largely toward the absolute level of cost estimates produced by the models, rather than the relative cost estimates across states. Since our hybrid proxy ceiling explicitly scales the model cost estimates based on existing state decisions and uses the model results simply to compute relative prices, we believe that these criticism do not apply in the present context.

811. Based on the record in this proceeding and in the LEC-CMRS Interconnection proceeding, we conclude that a range between 0.2 cents (\$0.002) per minute of use and 0.4 cents (\$0.004) per minute of use for unbundled local switching is a reasonable default proxy. In setting this default price range, we consider the range of evidence in the record, and believe that the most credible studies fall at the lower end of this range. However, so as to

¹⁸⁷⁸ For a more detailed discussion of these generic cost models, see infra, Section VII.C.3.

¹⁸⁷⁰ See, e.g., Florida Commission comments at 28-29; USTA comments at 54 n.45; Rural Tel. Coalition reply at 35.

¹⁹²⁹ See, e.g., Maryland Commission comments at Appendix B (Maryland Commission Order No. 72348, Case No. 8548 Phase II).

minimize disruption for any state that has set a rate only marginally outside this range, we will grandfather any state that has set a rate at 0.5 cents (\$0.005) per minute of use or less pending completion of an economic study pursuant to the methodology set forth in this Order.

812. The forward-looking cost studies contained in the record estimate that the average cost of end-office switching ranges from 0.18 cents (\$0.0018) per minute of use ¹⁹³⁰ to 0.35 cents (\$0.0035) per minute of use. ¹⁹³¹ Maryland and Florida have adopted rates based on forward-looking economic cost studies that fall within the default price range we are adopting. ¹⁹³² NYNEX's estimate of 0.129 cents (\$0.00129) per minute of use, in the Massachusetts proceeding, is estimate an estimate of the marginal cost of end-office switching. ¹⁹³³ As discussed above, we generally expect studies estimating marginal costs to generate estimates that are less than

p.28-32; Letter from Robert F. Roche, CTIA, to William F. Caton, Acting Secretary, FCC, December 8, 1995, in CC Docket No. 94-54 (Incremental Cost of Local Usage, Brock Paper No. 3), p. 1; Hatfield Model, Version 2.2, Release 1, (Hatfield Associates, Inc. March 1996), submitted by AT&T and MCI on May 16, 1996); AT&T reply at Appendix D (Update of the Hatfield Model, Version 2.2, Release 1).

Network Elements, Theory, Modeling, and Policy Implications," prepared for MCI by Hatfield Assoc., Inc. p.34.

¹⁰⁰¹ Letter from Whitney Hatch, Assistant Vice President Regulatory Affairs, GTE, to William F. Caton, Acting Secretary, FCC, July 11, 1996 at Attachment 2 (Economic Evaluation of Version 2.2 of the Hatfield Model), pp.16-17.

¹⁹⁸² See Maryland Commission comments at Appendix B (Maryland Commission Order No. 72348, Case No. 8584 Phase II), pp. 28-32; Cox June 20, 1996 Ex Parte at 4.

of Paula L. Brown, Managing Director, NYNEX Corporation, in Massachusetts Dept. of Pub. Util. Docket No. 93-125, Workpaper 2), p.6.

estimates derived from TELRIC-based studies. We, therefore, conclude that 0.2 cents (\$0.002) per minute of use is a reasonable lower end of the price range for end-office switching.

- to be an outlier that is significantly higher than the other estimates. We find that USTA's estimate does not represent an appropriate cost model for termination of traffic. USTA's estimate is based on the high end of a set of econometric estimates of LEC-reported cost data rather than an independent cost estimate, and USTA gives no explanation of why we should regard this as the best estimate. In addition, USTA's figure is derived, at least in part, from studies that attempt to measure the incremental cost of end-to-end use of the network for local calls, not the cost of local switching. Pacific Bell's study of the average LRIC of a call terminating under "Feature Group B" 1905 apparently includes terminations at tandem switches in addition to end-office terminations.
- 814. Michigan and Illinois have adopted rates for transport and termination of traffic that are higher than the default price range we adopt for end-office switching. Michigan, which established mutual compensation rates of 1.5 cents (\$0.015) per minute of use, did not review a forward-looking cost study. Illinois's 0.5 cents (\$0.005)

¹⁹³⁴ USTA comments in CC Docket No. 95-185 at Attachment (Bill and Keep: A Bad Solution to a Non-Problem), pp.9-10.

¹⁹³⁵ Pacific Bell comments in CC Docket No. 95-185 at Exhibit B (Submission of Jerry A. Hausman), para. 32.

Michigan Commission comments at Attachment 1 (State of Michigan, Case No. U-10647, Opinion and Order, February 23, 1995), p.28; Illinois Commission comments at Attachment C (Illinois Commérce Commission Docket No. 94.0096), pp.83-86, 98.

Michigan Commission comments at Attachment 1 (State of Michigan, Case No. U-10647, Opinion and Order, February 23, 1995), p.28.

per minute rate for termination through the end office is just outside the range we are establishing. First, as previously stated, we are grandfathering rates of 0.5 cents (\$0.005) per minute or lower. Further, we do not believe Illinois's rate overrides the weight of evidence in the record, which supports the range we are establishing.

b. Discussion

838. As noted earlier, we will continue to review our pricing methodology, and will make revisions as appropriate. Accordingly, there is no present need to establish a Commission price cap or cost index system to adjust interconnection and unbundled element rate levels.

a. Criteria for Cost Studies

911. There has been considerable debate on the record in this proceeding and before the state commissions on whether section 252(d)(3) embodies an "avoided" cost standard or an "avoidable" cost standard. We find that "the portion [of the retail rate] . . . attributable to costs that will be avoided" includes all of the costs that the LEC incurs in maintaining a retail, as opposed to a wholesale, business. In other words, the avoided costs are those that an incumbent LEC would no longer incur if it were to cease retail operations and instead provide all of its services through resellers. Thus, we reject the arguments of incumbent LECs and others who maintain that the LEC must actually experience a reduction in its operating expenses for a cost to be considered "avoided" for purposes of section 252(d)(3). We do not believe that Congress intended to allow incumbent LECs to sustain artificially high wholesale prices by declining to reduce their expenditures to the degree that certain costs are readily avoidable. We therefore interpret the 1996 Act as requiring states to make an objective assessment of what costs are reasonably avoidable when a LEC sells its services wholesale. We note that Colorado, Georgia, Illinois, New York, and Ohio commissions have all interpreted the 1996 Act in this manner. 2794

925. We find that we can use MCI's model, with some modifications, along with the results of certain state proceedings, to establish a range of rates that would produce an acceptable default wholesale discount rate that reasonably approximates the amount of avoided costs that should be subtracted from the retail rate. A default rate is to be used only in three instances: (1) in a state arbitration proceeding if an avoided cost study that satisfies the criteria we set forth above does not exist; (2) where a state has not completed its review of such an avoided cost study; (3) where a rate established by a state before the release date of this Order is based on a study that does not comply with the criteria described in the previous section. We emphasize that the default rate is to be used as an interim measure only, and should be replaced with an avoided cost study within a reasonable time. The MCI model is a reasonable attempt at estimating avoided cost in accordance with section 252(d)(3) using only publiclyavailable data. We find, however, that we should modify certain features of the model.

926. First, MCI treats account 6722 (external relation) and account 6727 (research and development) as avoidable costs. MCI argues that purchasers of wholesale services are competing with LECs and, therefore, should not be forced to fund regulatory activities reflected in account 6722. MCI claims that research and develop-

No. 2610 in Compliance with Communications, Inc. Filing Advice Letter No. 2610 in Compliance with Commission Decision No. C96-521 Adopting Emergency Rules, Docket No. 96S-233T (Colorado Commission June 21, 1996) at paras. 12-13; Petiton of AT&T for the Commission to Establish Resale Rules, Rates, Terms, and Conditions.

ment are not of practical use for the services that resellers will purchase. As explained above, this type of disallow-ance is not contemplated by the avoided cost standard of section 252(d)(3). We therefore adjust the model to treat these costs in the same manner as other overhead expense accounts.

- 927. Second, MCI treats a number of accounts as "other avoided costs" on the grounds that the expenses in those accounts are not relevant to the provision of telecommunications services that an incumbent LEC currently provides.2204 Public telephone terminal equipment expense and large PBX expense are not "avoided" precisely because they are unrelated to the retail services being discounted. We would not expect these expenses to be included in retail service rates for resold services; but if these expenses were included in retail rates, they would not be avoided when the services are purchased by resellers. The rest of MCI's "other" accounts contain costs that support all of the telecommunications services offered by the company. MCI has not shown that any of these costs are either reduced or eliminated when services are sold at wholesale. We, therefore, adjust the MCI model so as not to treat these accounts as avoidable costs.
- 928. Third, MCI treats accounts 6611 (product management), 6612 (sales), 6613 (product advertising), and 6623 (customer services) as costs that are entirely avoided with respect to services purchased at wholesale. We agree that a large portion of the expenses in these accounts is avoided when service is sold at wholesale. We also agree, however, with parties that argue that some expenses in

expense), account 6341 (large PBX expense), account 6511 (property held for future telecommunications use expense), account 6551 (public telephone terminal equipment expense), account 6512 (provisioning expense), account 6562 (depreciation expense for property held for future telecommunications use), and account 6564 (amortization expense, intangible).

these accounts will continue to be incurred with respect to wholesale products and customers, and that some new expenses may be incurred in addressing the needs of resellers as customers. No party in this proceeding has suggested a specific adjustment to the MCI model that would account for these costs of the wholesale operation. We note that, in their own proceedings, several states have made varying estimates concerning the level of wholesalerelated expenses in these accounts. Colorado, for example, estimated that none of the costs in accounts 6611-6613 would relate to wholesale services, and that only five percent of the costs in account 6623 would be incurred in a wholesale operation.2205 The Georgia Commission, on the other hand, decided that 25 percent of sales and product advertising expenses would continue to be incurred in the wholesale operation.2206 Given the lack of evidence, and the wide range of estimates that have been made by these states, we find it reasonable to assume, for purposes of determining a default range of wholesale discount rates, that ten percent of costs in accounts 6611, 6612, 6613, and 6623 are not avoided by selling services at wholesale.

929. Fourth, MCI uses a complex formula to calculate the portions of overhead and general support expense that are attributable to avoided costs. We find that this formula is constructed in a way that tends to inflate the results of

²⁰⁰⁸ U S West Communications, Inc. Filing Advice Letter No. 2610 in Compliance with Commission Decision No. C96-521 Adopting Emergency Rules, Docket No. 96S-233T (Colorado Commission June 21, 1996) at para. 12 and n.20. The Colorado Commission explained that it chose 5 percent because "some small portion of customer services will remain for the interfaces of Operational Support Systems of [U S West] and the resellers, but nowhere near the amount necessary for direct customer contact services." Id. n.20.

Rules, Rates, Terms, and Conditions and Initiate Unbundling of Services, Docket No. 6352U (Georgia Commission June 21, 1996) at Appendix 1. The Georgia Commission characterized its calculations with respect to sales expense as "conservative at best."

the calculation. We have, therefore, substituted a more straightforward approach in which we apply to each indirect expense category the ratio of avoided direct expense to total expenses. We also identify a slightly different list of accounts representing indirect costs than that proposed by MCI.

930. With the modifications described above, and using actual 1995 data, MCI's model produces the following results for the RBOCs and GTE:

US West	18.80%
GTE	18.81%
BellSouth	19.20%
Bell Atlantic	19.99%
SBC	20.11%
NYNEX	21.31%
Pacific	23.87%
Ameritech	25.98%

931. We also take into account the experience of those state commissions, Illinois and Georgia, that have undertaken or approved detailed avoided cost studies under the pricing standard of section 252(d)(3) of the 1996 Act. Applying the statutory standard to the examination of significant cost studies, those commissions derived average wholesale discounts of 18.74 percent and 20.07 percent. We find that these decisions present evidence of an appropriate wholesale discount that should be given more weight than state commission decisions that have set their

residential services, the Georgia Commission's avoided cost computation would have yielded an aggregate wholesale discount rate of 18.74 percent. This figure is computed by dividing the total avoided costs computed by the Georgia Commission by the total BellSouth residential and business revenues (which were used individually both to apportion total avoided costs between residential and business service and as the denominator in the final wholesale discount calculations).

discounts under other pricing standards or only on an interim basis. 2208

932. Accordingly, based on the record before us, we establish a range of default discounts of 17-25 percent that is to be used in the absence of an avoided cost study that meets the criteria set forth above. A state commission that has not set wholesale prices based on avoided cost studies that meet the criteria set forth above as of the release date of this Order shall use a default wholesale discount rate between 17 and 25 percent. A state should articulate the basis for selecting a particular discount rate. If this default discount rate is used, the state commission must establish wholesale rates based on avoided cost studies within a reasonable time. The avoided cost study must comply with the criteria for avoided cost studies described above. A state commission may submit an avoided cost study to this Commission for a determination of whether it complies with these criteria. If a party (either a reseller or an incumbent LEC) believes that a state commission has failed to act within a reasonable period of time, that party may file a petition for declaratory ruling with this Commission, asking us to determine whether the state has failed to comply with this rule. We will, in making such determinations, consider the particular circumstances in the state involved. If a state commission has adopted as of the release date of this Order an interim wholesale pricing decision that relies on an avoided cost study that meets the criteria set forth above,

Own Motion into Competition for Local Exchange Service, R. 95-04-043 and I. 95-04-044 (California Commission April 26, 1996); U S West Communications, Inc. Filing Advice Letter No. 2610 in Compliance with Commission Decision No. C96-521 Adopting Emergency Rules, Docket No. 96S-233T (Colorado Commission June 21, 1996); Wholesale Rates for Telecommunications Services Ruling on AT&T's Petiton for a Reduction on the Wholesale Rates of Bell Atlantic—Maryland, Inc., Case No. 8721 (Maryland Commission June 27, 1996).

the state commission may continue to require an incumbent LEC to offer services for resale under such interim wholesale prices in lieu of the default discount range, so long as the state commission's interim pricing rules are fully enforceable by resellers and followed by a final decision within a reasonable period of time that adopts an avoided cost study that meets the criteria set forth above.

* * * *

984. Although incumbent LECs may continue to recover the SLC when other carriers resell their local exchange services, the SLC is not subject to the wholesale pricing standard of section 252(d)(3). As described above, resellers of local exchange service are not reselling access services; they are purchasing these services from incumbent LECs in the same manner they do today. The SLC is a component of interstate access charges, not of intrastate local service rates. Consistent with the principles of cost-causation and economic efficiency, we have required the portion of interstate allocated loop costs represented by the SLC to be recovered from end users, rather than from carriers as with other access charges. Although the SLC is listed on end user monthly local service bills, this charge does not represent a "telecommunications service [an incumbent LEC] provides at retail to subscribers." Rather, the SLC, like other interstate access charges, relates solely to incumbent LEC interstate access services, which are provided to other carriers rather than retail subscribers and which we have concluded are not subject to the resale requirements of section 251(c)(4). Therefore, the reseller shall pay the SLC to the incumbent LEC for each subscriber taking resold service. The specific SLC that applies depends upon the identity of the end user served by the reselling telecommunications carrier.

1023. Sections 251, 252, 332 and 201 are designed to

achieve the common goal of establishing interconnection

and ensuring interconnection on terms and conditions that are just, reasonable, and fair. It is consistent with the broad authority of these provisions to hold that we may apply sections 251 and 252 to LEC-CMRS interconnection. By opting to proceed under sections 251 and 252, we are not finding that section 332 jurisdiction over interconnection has been repealed by implication, or rejecting it as an alternative basis for jurisdiction. We acknowledge that section 332 in tandem with section 201 is a basis for jurisdiction over LEC-CMRS interconnection; we simply decline to define the precise extent of that jurisdiction at this time.

1024. As a practical matter, sections 251 and 252 create a time-limited negotiation and arbitration process to ensure that interconnection agreements will be reached between incumbent LECs and telecommunications carriers. including CMRS providers. We expect that our establishment of pricing methodologies and default proxies which may be used as interim rates will help expedite the parties' negotiations and drive voluntary CMRS-LEC interconnection agreements. We also believe that sections 251 and 252 will foster regulatory parity in that these provisions establish a uniform regulatory scheme governing interconnection between incumbent LECs and all requesting carriers, including CMRS providers. Thus, we believe that sections 251 and 252 will facilitate consistent resolution of interconnection issues for CMRS providers and other carriers requesting interconnection.

1025. Although we are applying sections 251 and 252 to LEC-CMRS interconnection at this time, we preserve the option to revisit this determination in the future. We note that Section 332 generally precludes states from rate and entry regulation of CMRS providers, and thus, differentiates CMRS providers from other carriers. 2430 We

²⁴⁵⁰ In passing section 332 in 1993, Congress stated that it intended to "foster the growth and development of mobile services that, by their nature, operate without regard to state lines as an

also recognize that, based on the combined record in CC Docket No. 95-185 and CC Docket No. 96-68, there have been instances in which state commissions have treated CMRS providers in a discriminatory manner with respect to the terms and conditions of interconnection. Should the Commission determine that the regulatory scheme established by sections 251 and 252 does not sufficiently address the problems encountered by CMRS providers in obtaining interconnection on terms and conditions that are just, reasonable and nondiscriminatory, the Commission may revisit its determination not to invoke jurisdiction under section 332 to regulate LEC-CMRS interconnection rates.

5. Bill and Keep

a. Background

defined bill-and-keep arrangements as those in which neither of two interconnecting networks charges the other network for terminating traffic that originated on the other network. Instead, each network recovers from its own end users the cost of both originating traffic delivered to the other network and terminating traffic received from the other network. A bill-and-approach for termination of traffic does not, however, preclude a positive flat-rated charge for transport of traffic between carriers' networks.

1112. Section 252(d)(2)(A)(i) provides that to be just and reasonable, reciprocal compensation must "provide for the mutual and reciprocal recovery by each carrier of costs associated with transport and termination." 2716

integral part of the national telecommunications infrastructure." H.R. Report No. 103-11, 103d. Cong., 1st Sess. 260 (1993).

²⁴³¹ See supra, Section VII.D.

²⁶³⁶ NPRM at para. 239.

^{2715 47} U.S.C. § 252(d)(2)(A)(i).

In general, we find that carriers incur costs in terminating traffic that are not de minimis, and consequently, bill-andkeep arrangements that lack any provisions for compensation do not provide for recovery of costs. In addition, as long as the cost of terminating traffic is positive, bill-andkeep arrangements are not economically efficient because they distort carriers' incentives, encouraging them to overuse competing carries' termination facilities by seeking customers that primarily originate traffic. On the other hand, when states impose symmetrical rates for the termination of traffic, 2716 payments from one carrier to the other can be expected to be offset by payments in the opposite direction when traffic from one network to the other is approximately balanced with the traffic flowing in the opposite direction. In such circumstances, bill-andkeep arrangements may minimize administrative burdens and transaction costs. We find that, in certain circumstances, the advantages of bill-and-keep arrangements outweigh the disadvantages, but no party has convincingly explained why, in such circumstances, parties themselves would not agree to bill-and-keep arrangements. We are mindful, however, that negotiations may fail for a variety of reasons. We conclude, therefore, that states may impose bill-and-keep arrangements if traffic is roughly balanced in the two directions and neither carrier has rebutted the presumption of symmetrical rates.

XII. EXEMPTIONS, SUSPENSIONS, AND MODIFICATIONS OF SECTION 251 REQUIREMENTS

A. Background

1249. Section 251(f)(1) grants rural telephone companies an exemption from section 251(c), until the rural telephone company has received a bona fide request for

²⁷¹⁶ See infra, Section XI.A.4. for a discusison of symmetrical rates.

interconnection, services, or network elements, and the state commission determines that the exemption should be terminated. Section 251(f)(2) allows LECs with fewer than two percent of the nation's subscriber lines to petition a state commission for a suspension or modification of any requirements of sections 251(b) and (c). Section 251(f) imposes a duty on state commissions to make determinations under this section, and establishes the criteria and procedures for the state commissions to follow. In the NPRM, we tentatively concluded that state commissions have the sole authority to make determinations under section 251(f). In addition, we sought comment on whether we should issue guidelines to assist state commissions when they make determinations regarding exemptions, suspensions, or modifications under section 251(f).

1250. Although subsections (f)(1) and (f)(2) both address the circumstances under which an incumbent LEC could be relieved of duties otherwise imposed by section 251, subsection 251(f)(2) also applies to non-incumbent LECs. The standard for determining whether to exempt a carrier under subsection 251(f)(1) is different from the standard for determining whether to grant a suspension or modification under subsection (f)(2). Subsection 251(f) (1)(B) requires state commissions to determine that terminating a rural exemption is consistent with the universal

³⁰⁵⁰ A rural telephone company is defined as a local exchange carrier operating entity to the extent that such entity "(A) provides common carrier service to any local exchange carrier study area that does not include either— (i) any incorporated place of 10,000 inhabitants or more, or any part thereof . . .; or (ii) any territory, incorporated or unincorporated, included in an urbanized area . . .; (B) provides telephone exchange service, including exchange access, to fewer than 50,000 access lines; (C) provides telephone exchange service to any local exchange carrier study area with fewer than 100,000 access lines; or (D) has less than 15 percent of its access lines in communities of more than 50,000 on the date of enactment of the Telecommunications Act of 1996." 47 U.S.C. § 153(37).

service provisions of the 1996 Act. Subsection 251(f) (2)(A)(i) requires state commissions to grant a suspension or modification if it is necessary to "avoid a significant adverse economic impact on users of telecommunications services generally," and subsection 251(f)(2)(B) requires a suspension or modification to be "consistent with the public interest, convenience, and necessity." Although we address these two subsections together, we highlight instances in which we believe that differences in statutory language require different treatment by state commissions.

1251. We discuss below issues raised by the commenters, and establish some rules regarding the requirements of section 251(f) that we believe will assist state commissions as they carry out their duties under section 251(f). For the most part, however, we expect that states will interpret the requirements of section 251(f) through rulemaking and adjudicative proceedings. We may in the future initiate a Notice of Proposed Rulemaking on certain additional issues raised by section 251(f) if it appears that further action by the Commission is warranted.

B. Need for National Rules

1. Comments

1252. Most state commissions some and some other

³⁰⁶¹ The provision states, "the State commission shall terminate the exemption if the request . . . is consistent with section 254 (other than subsections (b)(7) and (c)(1)(D) thereof)." 47 U.S.C. \$ 251(f)(1)(B).

^{3062 47} U.S.C. § 251(f)(2).

soca See, e.g., Alaska Commission comments at 6; Alabama Commission comments at 33-34; California Commission comments at 46; Idaho Commission comments at 14; Illinois Commission comments at 84; Louisiana Commission comments at 22-23; Ohio Commission comments at 80; Oregon Commission comments at 31; Pennsylvania Commission comments at 42; Texas Commission comments at 34; Wyoming Commission comments at 38-39.

parties 3064 assert that states should have exclusive responsibility for the guidelines and determinations made under this section. Several commenters contend that any guidelines the Commission might issue would be useless, because generalized national guidelines could not take into account the variations among states and among individual LECs. 3065 For example, the Minnesota Independent Coalition argues that the additional grant of authority to states under section 214(e) confirms that state commissions have the sole authority to make determinations under section 251(f). **oee A number of small telephone companies and associations of LECs advocate mandatory national rules regarding implementation of section 251(f). They assert that such rules would ensure that states carry out this provision in accordance with congressional intent. 8067 Some commenters favor a middle ground, claiming that non-mandatory guidelines from the Commission would be helpful, but that mandatory requirements would conflict with the Act's delegation to the states to make determinations under section 251(f). 3068

³⁰⁶⁴ Ad Hoc Telecommunications Users Committee comments at 11; ALLTEL comments at 16; Citizens Utilities comments at 34; Colorado Ind. Tel. Ass'n comments at 5-6; GVNW comments at 42; GTE comments at 80; Home Tel. comments at 1; Illinois Ind. Tel. Ass'n comments at 7; Minnesota Ind. Coalition comments at 14; Ohio Consumers' Counsel reply at 25-26; PacTel comments at 99; Puerto Rico Tel. reply at 16-17; Rural Tel. Coalition comments at 11-15.

³⁰⁶⁵ Minnesota Ind. Coalition comments at 14; Western Alliance comments at 7.

³⁰⁶⁶ Minnesota Ind. Coalition comments at 14.

aoer Anchorage Tel. Utility comments at 2-4; Bay Springs, et al. comments at 10; Centennial Cellular Corp. comments at 12; Alaska Tel. Ass'n comments at 6; Matanuska Tel. Ass'n comments at 5; USTA comments at 87-93.

comments at 4. Several parties argue that any federal action should not be mandatory. Ohio Commission comments at 80; Citizens Utilities comments at 33; Colorado Ind. Tel. Ass'n comments at 6; Rural Tel. Coalition reply at 18-19.

2. Discussion

1253. We agree with parties, including small incumbent LECs, who argue that determining whether a telephone company is entitled, pursuant to section 251(f), to exemption, suspension, or modification of the requirements of section 251 generally should be left to state commissions. Requests made pursuant to section 251(f) seek to carve out exceptions to application of the section 251 rules that we are establishing in this proceeding. We find that Congress intended the section 251 requirements, and the Commission's implementing rules thereunder, to apply to all carriers throughout the country, except in the circumstances delineated in the statute. We find convincing assertions that it would be an overwhelming task at this time for the Commission to try to anticipate and establish national rules for determining when our generally-applicable rules should not be imposed upon carriers. Therefore, we establish in this Order a very limited set of rules that will assist states in their application of the provisions in section 251(f).

1254. Many parties have proposed varying interpretations of the provisions in section 251(f), and have asked for Commission determination or a statement of agreement. Because it appears that many parties welcome some guidance from the Commission, we briefly set forth our interpretation of certain provisions of section 251(f). Such statements will assist parties and, in particular, state commissions that must make determinations regarding requests for exemption, suspension, and modification.

3. Discussion

1262. Congress generally intended the requirements in section 251 to apply to carriers across the country, but Congress recognized that in some cases, it might be unfair

See, e.g., Minnesota Ind. Coalition comments at 14; Rural Tel. Coalition comments at 11.

or inappropriate to apply all of the requirements to smaller or rural telephone companies. 8103 We believe that Congress intended exemption, suspension, or modification of the section 251 requirements to be the exception rather than the rule, and to apply only to the extent, and for the period of time, that policy considerations justify such exemption, suspension, or modification. We believe that Congress did not intend to insulate smaller or rural LECs from competition, and thereby prevent subscribers in those communities from obtaining the benefits of competitive local exchange service. Thus, we believe that, in order to justify continued exemption once a bona fide request has been made, or to justify suspension, or modification of the Commission's section 251 requirements, a LEC must offer evidence that application of those requirements would be likely to cause undue economic burdens beyond the economic burdens typically associated with efficient competitive entry. State commissions will need to decide on a case-by-case basis whether such a showing has been made.

1263. Given the pro-competitive focus of the 1996 Act, we find that rural LECs must prove to the state commission that they should continue to be exempt pursuant to section 251(f)(1) from requirements of section 251(c), once a bona-fide request has been made, and that smaller companies must prove to the state commission, pursuant to section 251(f)(2), that a suspension or modification of requirements of sections 251(b) or (c) should be granted. We conclude that it is appropriate to place the burden of proof on the party seeking relief from otherwise applicable requirements. Moreover, the party seeking exemption, suspension, or modification is in control of the relevant information necessary for the state to make a determination regarding the request. A rural company that falls within section 251(f)(1) is not required to make any showing until it receives a bona fide request for interconnection, services, or network elements. We decline at

^{8108 47} U.S.C. \$ 251(f).

this time to establish guidelines regarding what constitutes a bona fide request. We also decline in this Report and Order to adopt national rules or guidelines regarding other aspects of section 251(f). For example, we will not rule in this proceeding on the universal service duties of requesting carriers that seek to compete with rural LECs. We may offer guidance on these matters at a later date, if we believe it is necessary and appropriate.

- 1264. We find that Congress intended section 251(f) (2) only to apply to companies that, at the holding company level, have fewer than two percent of subscriber lines nationwide. This is consistent with the fact that the standard is based on the percent of subscriber lines that a carrier has "in the aggregate nationwide." Moreover, any other interpretation would permit almost any company, including Bell Atlantic, Ameritech, and GTE affiliates, to take advantage of the suspension and modification provisions in section 251(f)(2). Such a conclusion would render the two percent limitation virtually meaningless.
- 1265. We note that some parties recommend that, in adopting rules pursuant to section 251, the Commission provide different treatment or impose different obligations on smaller or rural carriers. We conclude that section 251(f) adequately provides for varying treatment for smaller or rural LECs where such variances are justified in particular instances. We conclude that there is no basis in the record for adopting other special rules, or limiting the application of our rules to smaller or rural LECs.

1291. Requirements set forth in section 252(c) for arbitrated agreements would apply to arbitration conducted by the Commission. We see no reason, and no

^{3104 47} U.Ş.C. § 251(f)(2) (emphasis added).

side For example, the Rural Tel. Coalition argues that interconnection and collocation points should be set in a flexible manner to take into account size and volume differences among carriers. Rural Tel. Coalition comments at 31.

party has suggested a policy or legal basis, for not applying such standards when the Commission conducts arbitration. Thus, arbitrated agreements must: (1) meet the requirements of section 251, including regulations prescribed by the Commission pursuant to section 251: (2) establish any rates for interconnection, services, or network elements according to section 252(d); and (3) provide a schedule for implementation of the terms and conditions by the parties to the agreement. 3160 We reject the suggestion made by some parties that, if the Commission steps into the state commission role, it is bound by state laws and standards that would have applied to the state commission. While states are permitted to establish and enforce other requirements, these are not binding standards for arbitrated agreements under section 252(c). Moreover, the resources and time potentially needed to review adequately and interpret the different laws and standards of each state render this suggestion untenable. Finally, we conclude that it would not make sense to apply to the Commission the timing requirements that section 252(b)(4)(c) imposes on state commissions. The Commission, in some instances, might not even assume jurisdiction until nine months (or more) have lapsed since a section 251 request was initiated.

3. Discussion

1309. We conclude that it will assist the carriers in determining their respective obligations, facilitate the development of a single, uniform legal interpretation of the Act's requirements and promote a procompetitive, national policy framework to adopt national standards to implement section 252(i). Issues such as whether section 252(i) allows requesting telecommunications carriers to choose among provisions of prior interconnection agree-

^{8160 47} U.S.C. § 252(e).

ments or requires them to accept an entire agreement are issues of law that should not vary from state to state and are also central to the statutory scheme and to the emergence of competition. National standards will help state commissions and parties to expedite the resolution of disputes under section 252(i).

- 1311. We disagree with BellSouth regarding the significance of the legislative history quoted in the NPRM. The Conference Committee amended section 251(g), S. 652's predecessor to section 252(i), and changed "service, facility, or function" to "interconnection, service, or element." The House of Representatives' bill did not contain a version of section 252(i). We find that section 252(i)'s language does not differ substantively from the text of the Senate bill's section 251(g). The Senate Commerce Committee stated its provision, section 251(g), was intended to "make interconnection more efficient by making available to other carriers the individual elements of agreements that have been previously negotiated." 3207
- 1317. We find that section 252(i) permits differential treatment based on the LEC's cost of serving a carrier. We further observe that section 252(d)(1) requires that unbundled element rates be cost-based, and sections 251(c)(2) and (c)(3) require incumbent LECs to provide only technically-feasible forms of interconnection and access to unbundled elements, while section 252(i) mandates that the availability of publicly-filed agreements be limited to carriers willing to accept the same terms and

scot Although H.R. 1555's section 244(d) contained similar ideas, its language and structure are sufficiently different from that of section 252(i) that we do not consider section 244(d) to be a prior version of section 252(i).

portation on S. 652, S. Rpt. 104-23, 104th Cong., 1st Sess. (1995) at 21-22.

ment with the incumbent LEC. We conclude that these provisions, read together, require that publicly-filed agreements be made available only to carriers who cause the incumbent LEC to incur no greater costs than the carrier who originally negotiated the agreement, so as to result in an interconnection arrangement that is both cost-based and technically feasible. However, as discussed in Section VII regarding discrimination, where an incumbent LEC proposes to treat one carrier differently than another, the incumbent LEC must prove to the state commission that that differential treatment is justified based on the cost to the LEC of providing that element to the carrier.

XVI. ORDERING CLAUSES

1442. Accordingly, IT IS ORDERED that, pursuant to Sections 1-4, 201-205, 214, 224, 251, 252, and 303(r) of the Communications Act of 1934, as amended, and Section 601 of the Telecommunications Act of 1996, 47 U.S.C. §§ 151-154, 201-205, 224, 251, 252, 303(r) and 601, the REPORT AND ORDER IS ADOPTED, effective 30 days after publication of a summary in the Federal Register. The collections of information contained within are contingent upon approval by the Office of Management and Budget.

FCC 96-333

FEDERAL COMMUNICATIONS COMMISSION WASHINGTON, D.C. 20554

IN THE MATTERS OF

CC Docket No. 96-98

IMPLEMENTATION OF THE LOCAL COMPETITION
PROVISIONS OF THE TELECOMMUNICATIONS ACT OF 1996

CC Docket No. 95-185

INTERCONNECTION BETWEEN LOCAL EXCHANGE CARRIERS
AND COMMERCIAL MOBILE RADIO SERVICE PROVIDERS

NSD File No. 96-8

AREA CODE RELIEF PLAN FOR DALLAS
AND HOUSTON, ORDERED BY THE PUBLIC UTILITY
COMMISSION OF TEXAS

CC Docket No. 92-237

ADMINISTRATION OF THE NORTH AMERICAN NUMBERING PLAN

IAD File No. 94-102

PROPOSED 708 RELIEF PLAN AND 630 NUMBERING PLAN AREA CODE BY AMERITECH-ILLINOIS

SECOND REPORT AND ORDER AND MEMORANDUM OPINION AND ORDER

Adopted: August 8, 1996 Released: August 8, 1996

By the Commission:

. . . .

5. With respect to toll service, we further find that section 251(b)(3) requires, at a minimum, that customers be entitled to choose different presubscribed, or preselected, carriers for both their intraLATA and interLATA toll calls. In states, like Alaska and Hawaii, that have no LATAs, customers must be able to choose different presubscribed carriers for both their intrastate and interstate toll calls. Based on this finding, we adopt a rule requiring all LECs to implement intraLATA and interLATA toll dialing parity, using the "full 2-PIC" presubscription method. The toll dialing parity requirement we adopt is

^{14 47} U.S.C. § 153(25). According to the 1996 Act, a LATA is a "local access and transport area." It is a "contiguous geographic area—

⁽A) established before the date of enactment of the Telecommunications Act of 1996 by a Bell operating company such that no exchange area includes points within more than 1 metropolitan statistical area, consolidated metropolitan statistical area, or State, except as expressly permitted under the AT&T Consent Decree; or

⁽B) established or modified by a Bell operating company after such date of enactment and approved by the Commission."

¹⁵ We note that the abbreviation "PIC" in the past has stood for the term "primary," or "preferred, interexchange carrier." While we retain the acronym "PIC," we define the term to include any

defined by LATA boundaries given that the Bell Operating Companies' (BOCs') operations are likely to be shaped by LATA boundary restrictions for a period of unforeseeable duration. Given that implementation of the 1996 Act over time may diminish the significance of LATA boundaries, however, we permit states to redefine the toll dialing parity requirement based on state, rather than LATA, boundaries where a state deems such a requirement to be procompetitive and otherwise in the public interest. 16

b. Discussion

25. We conclude that the purpose of the statutory dialing parity requirements—to facilitate the introduction of competition in the local and toll markets—is best served by the adoption of broad guidelines and minimum federal standards that build upon the states' experiences. We conclude that such minimum nationwide standards will facilitate competition to the extent that new entrants seeking to offer regional or national services will not be subjected to an array of differing state standards and timetables.³⁹

toll carrier for purposes of the presubscription rules that we adopt in this Order. For a discussion of the full 2-PIC presubscription methodology, see infra section II.B(4).

on LATA boundaries, a customer would be entitled to choose a primary carrier for all intraLATA toll calls and a separate, or the same, primary carrier for all interLATA toll calls. If the presubscription requirement were based on state boundaries, a customer would be entitled to choose a primary carrier for all intrastate toll calls and a separate, or the same, primary carrier for all interstate toll calls.

39 We note that section 271(e)(2)(B) precludes most states from requiring a BOC to implement intraLATA toll dialing parity in a state before the BOC has received authority to provide in-region, interLATA services in such state or before three years after enactment of the 1996 Act, whichever is earlier. 47 U.S.C. § 271(e)(2)(B).

We note that our conclusion to adopt nationwide dialing parity standards is consistent with our conclusion in the First Report and Order that nationwide standards to implement other section 251 provisions are necessary to facilitate competition by serving as a backdrop against which interconnection negotiations and arbitration can occur.40 We are persuaded that, contrary to the views of Bell Atlantic, the failure to adopt minimum federal standards would harm both new entrants and consumers by delaying the introduction of competition and imposing additional costs on competitors, including small entities, particularly when different network configurations are required in each market. We conclude that uniform standards-in some cases minimum, uniform standards—will speed competitive entry by more promptly opening the local and toll markets to competition.

c. Discussion

29. We adopt our tentative conclusion that section 251(b)(3) creates a duty to provide dialing parity to competing providers of telephone exchange service and telephone toll service with respect to all telecommunications services that require dialing to route a call, and encompasses international as well as interstate and intrastate, local and toll services. We note that section 251(b)(3) does not limit the types of traffic or services for which dialing parity must be provided to competing providers of telephone exchange and telephone toll service. The reference to these types of providers clearly shows that dialing parity must be provided for exchange service and toll service. Nothing in the statutory language limits the scope of the dialing parity obligation to exchange and toll services or distinguishes among the various types of telecommuni-

⁴⁰ See First Report and Order at section II.

⁵⁴ NPRM at para. 206.

cations services in imposing the dialing parity obligations. This conclusion is further supported by the statutory definition of dialing parity insofar as it refers to the provision of "telecommunications services" generally without distinction among various types of telecommunications services.55 In addition, we are not persuaded that section 251(g) relieves certain LECs of the duty to provide toll dialing parity. That section contains no reference or cross reference to dialing parity or to section 251(b)(3). Section 251(g) preserves the equal access obligations already imposed on the BOCs and GTE, but does not exempt them or other LECs from the toll dialing parity requirements. Finally, we note that CMRS providers are not required to provide dialing parity or nondiscriminatory access under section 251(b)(3) because the Commission has not determined that CMRS providers are LECs and section 332(c) of the Communications Act of 1934 provides that a "person engaged in the provision of commercial mobile services . . . shall not be required to provide equal access to common carriers for the provision of toll services." 56

c. Discussion

37. With respect to toll service, we conclude that section 251(b)(3) requires, at a minimum, that customers be entitled to choose presubscribed carriers for their intra-LATA and interLATA toll calls. Because of the variations that exist among LATA boundaries and toll traffic within, and among, the various states, we have also concluded that each state should have the opportunity to determine whether customers should be able to presubscribe to carriers for intrastate toll service and for inter-

⁵⁵ The issue of whether a separate presubscription choice is required for international, interstate, and intrastate toll calls is discussed more fully in section II.B(2) infra.

^{56 47} U.S.C. § 332(c)(8).

state toll service in lieu of the intraLATA and interLATA toll presubscription dichotomy that we have established as a minimum nationwide standard at this time. Although toll dialing parity typically has been based on LATA boundaries in multi-LATA states where it has been implemented, we do not impose a requirement that toll dialing parity be based only on LATA boundaries given our expectation that implementation of the 1996 Act eventually will diminish the significance of LATA boundaries. 80 We are aware that BOCs remain subject to certain LATA boundary restrictions for at least the near-term and that some BOCs may find it technically infeasible, or otherwise undesirable, to implement toll dialing parity based on state boundaries.81 We thus conclude that states should be able to take the relevance of those factors into account, where applicable, and have the flexibility to require that toll dialing parity implementation be based on state boundaries where they determine that implementing toll dialing parity on the basis of state boundaries would be pro-competitive and otherwise in the public interest. In Alaska and Hawaii, states with no LATAs, toll dialing parity will continue to be based on state boundaries.

38. We also direct each LEC to submit to the state regulatory commission for each state in which it provides telephone exchange service the LEC's plan for implement-

so USTA correctly notes that independent exchange carriers have not been subject to the interLATA line of business restrictions that were imposed on the BOCs pursuant to the AT&T Consent Decree. See United States v. American Telephone and Telegraph Co., 552 F. Supp. 226 (D.D.C. 1982). See USTA comments at 3 n.2.

^{**}Property of the BOCs receive authority to provide inregion, interLATA services, they are required to provide such
services through a separate affiliate for at least three years pursuant to section 272 of the 1996 Act. See 47 U.S.C. §§ 272(a)(2),
(f)(1). Accordingly, it appears that the LATA distinction will
remain relevant insofar as it will continue to define the geographic
areas in which a BOC must provide toll services through an affiliate
and those in which it may provide toll services directly.

ing toll dialing parity. That plan must contain detailed implementation information, including the proposed date for dialing parity implementation for that exchange that the LEC operates in each state, and the method it proposes for enabling customers to select alternative providers of telephone toll service. For a LEC, other than a BOC, the plan also must identify the LATA with which the LEC proposes to associate.⁸²

c. Discussion

49. We adopt in this *Order* the full 2-PIC method as the minimum presubscription standard. Under our rules and pursuant to section 251(d)(3), 102 however, state commissions may impose more stringent presubscription requirements, such as multi-PIC or smart-PIC.

2. Discussion

59. As discussed above, we require all LECs to provide intraLATA and interLATA toll dialing parity no later than February 8, 1999. In addition, we require a LEC, including a BOC, to provide toll dialing parity throughout a state based on LATA boundaries coincident with its provision of in-region, interLATA or in-region, interstate toll services in that state. As discussed below, for non-BOC LECs that currently are providing, or within a year of release of this *Order* begin to provide, in-region, inter-LATA or in-region, interstate toll service, we provide a grace period during which those LECs will be able to provide such toll service before having to provide toll dialing parity to their customers. Moreover, non-BOC LECs that implement intraLATA and interLATA toll dialing parity

⁸² States may require a LEC to provide other categories of information in its plan in addition to the information categories stated here.

^{102 47} U.S.C. § 251(d)(3).

may choose whichever LATA within their state that they deem to be most appropriate to define the area within which they will offer intraLATA toll dialing parity. State commissions in ruling upon such a choice of LATA association shall determine whether the proposed LATA association is pro-competitive and otherwise in the public interest. We note, however, as discussed above, that states may redefine the toll dialing parity requirement based on state, rather than LATA, boundaries where a state deems such a requirement to be pro-competitive and otherwise in the public interest.

D. Implementation of the Local Dialing Parity Requirements

1. In General

a. Background

64. The NPRM tentatively concluded that, pursuant to section 251(b)(3), a LEC is required to permit telephone exchange service customers within a defined local calling area to dial the same number of digits to make a local telephone call, notwithstanding the identity of a customer's or the called party's local telephone service provider. The NPRM sought comment on this tentative conclusion. 141

b. Comments

65. Nearly all parties concur with the Commission's proposed interpretation of the local dialing parity requirements of section 251(b)(3). Ameritech contends, however, that the 1996 Act requires only that local calls between competing LECs be dialed without the use of an

¹⁴⁰ NPRM at para. 211.

¹⁴¹ Id.

¹⁴² See, e.g., ALTS comments at 4; GTE comments at 8; Ohio Commission comments at 8.

access code.143 Ameritech states that, while the Senate version of the dialing parity provision would have required LECs to provide customers with the ability "to dial the same number of digits" when using any carrier providing telephone exchange and exchange access service in the same area, Congress narrowed the dialing parity obligation in the final legislation to require only that calls between competing LECs be dialed without the use of an access code.144 In response to Ameritech's proposed interpretation of the local dialing parity requirements, the Ohio Consumers' Counsel asserts that it does "not believe that consumers would see any real functional difference between having to dial extra digits and having to dial an access code" and, thus, urges that customers not be required to dial access codes or extra digits when using a competing provider's services. 145

66. Ameritech also asks the Commission to clarify that "the dialing parity obligation applies only to competing carriers that provide both telephone exchange service and telephone toll service (i.e., competing LECs)." ¹⁴⁶ Finally, USTA urges the Commission to clarify that section 251 (b)(3) does not include an obligation to provide dialing parity to CMRS providers. ¹⁴⁷ USTA contends that the provision of dialing parity to CMRS providers by LECs would complicate implementation of "sender pays" arrangements that have been adopted in certain states if dialing parity were interpreted to preclude the use of extra

¹⁴³ Ameritech comments at 3-4. Notwithstanding its interpretation of the local dialing parity requirements, Ameritech notes that it has exceeded these requirements by establishing interconnection arrangements that allow customers of competing LECs to complete calls by dialing the same number of digits. *Id.* at 4.

¹⁴⁴ Id.

¹⁴⁵ Ohio Consumers' Counsel reply at 2.

¹⁴⁶ Ameritech comments at 3 n.6 (emphasis in original).

¹⁴⁷ USTA comments at 5.

digits and/or recorded announcements associated with a "sender pays" arrangement. USTA expesses concern that customers may receive bills for calling CMRS customers without advance notice that they are going to be billed for such calls. 149

c. Discussion

67. We adopt our tentative conclusion that, pursuant to section 251(b)(3), a LEC is required to permit telephone exchange service customers within a defined local calling area to dial the same number of digits to make a local telephone call, notwithstanding the identity of a customer's or the called party's local telephone service provider. As we stated in the NPRM, we believe that this interpretation of the dialing parity requirement as applied to the provision of telephone exchange service would best facilitate the introduction of competition in local markets by ensuring that customers of competitive service providers are not required to dial additional access codes or personal identification numbers in order to make local telephone calls. We disagree with Ameritech's view that Congress intended only to preclude the use of access codes and did not intend to preclude the dialing of extra digits. The fact that Congress ultimately adopted a dialing parity definition that precludes "the use of any access code" 150 does not constrain the Commission from precluding the dialing of extra digits, including access codes. Given that

¹⁴⁸ Id. In this context, the term "sender pays" refers to an arrangement under which a customer who originates a call to a CMRS customer pays the cost of airtime for terminating the call. Under a sender pays arrangement, the customer typically receives information regarding the price of the call before the call is placed. Once the customer receives this information, the customer then may decide whether or not to complete the call. Sender pays arrangements are atypical insofar as it is the CMRS customer who generally pays the cost of airtime for terminating calls.

¹⁴⁹ Id.

^{150 47} U.S.C. § 153(15).

the statute does not define the term "access code," we conclude that our interpretation of the local dialing parity requirement will avoid potential disputes concerning what is and what is not an "access code." We are also persuaded by the argument advanced by the Ohio Consumers' Counsel that consumers would not perceive a functional difference between having to dial extra digits and having to dial an access code when using a competing provider's services.

68. We conclude that Ameritech's additional argument that the dialing parity obligation applies only to competing carriers that provide both telephone exchange service and telephone toll service, represents an impermissibly narrow reading of the statute. We find that the phrase "providers of telephone exchange service and telephone toll service" imposes an obligation on LECs to provide dialing parity to providers of solely telephone exchange service, to providers of solely telephone toll service, or to providers of both telephone toll and exchange service. We believe that this interpretation is consistent with both the language of the statute and Congress' intent to encourage the entry of new competitors in both the local and toll markets. 151 We reject USTA's argument that the section 251(b)(3) dialing parity requirements do not include an obligation to provide dialing parity to CMRS providers.152 To the extent that a CMRS provider offers telephone exchange serv-

¹⁵¹ As the U.S. Court of Appeals for the Fifth Circuit stated in Peacock v. Lubbock Compress Company, "the word 'and' is not a word with a single meaning, for chameleonlike, it takes its color from its surroundings." The court held that "[i]n the construction of statutes, it is the duty of the Court to ascertain the clear intention of the legislature. In order to do this, Courts are often compelled to construe 'or' as meaning 'and,' and again 'and' as meaning 'or'." Peacock v. Lubbock Compress Company, 252 F.2d 892, 893 (5th Cir. 1958) (citing United States v. Fisk, 70 U.S. 445, 448 (1865)).

¹⁵² See section X of the First Report and Order for a discussion of the applicability of section 251 to CMRS providers.

ice, such a provider is entitled to receive the benefits of local dialing parity. Regarding USTA's argument that applying section 251(b)(3) in a way that benefits CMRS providers could complicate implementation of sender pays arrangements in some states, we conclude that the record before us is insufficient to determine whether, or under what circumstances, sender pays arrangements, including those requiring the dialing of extra digits or recorded announcements, are consistent with the 1996 Act. Although we do not intend to preclude the states from lawfully enforcing legitimate consumer protection policies that do not have an anticompetitive impact, we cannot conclude on this record that the arrangements USTA describes would be permissible. Finally, given our expectation that local dialing parity will be achieved through LECs' compliance with other section 251 requirements, we do not adopt a timetable for implementing the local dialing parity requirements.

2. Local Dialing Parity Methodologies

a. Background and Comments

69. In the NPRM, we stated our expectation that the local dialing parity obligations would not be achieved through presubscription. Rather, we anticipated that a customer's ability to select a telephone exchange service provider and make local telephone calls without dialing extra digits will be accomplished through the unbundling, number portability and interconnection requirements of section 251. The NPRM sought information and comment as to how the local dialing parity requirement should be implemented. 155

¹⁵³ NPRM at para. 207 n.284.

¹⁵⁴ Id.

¹⁵⁵ NPRM at paras. 209, 211.

70. The parties generally agree that local dialing parity will be accomplished through implementation of the unbundling, number portability and interconnection requirements of section 251. ¹⁵⁶ Parties add to this list the 1996 Act's equal access requirements. ¹⁵⁷ A few parties contend that local dialing parity is assured once competing providers of telephone exchange service are permitted nondiscriminatory access to telephone numbers. ¹⁵⁸

b. Discussion

71. We anticipate that local dialing parity will be achieved upon implementation of the number portability and interconnection requirements of section 251. We also concur with the view that the ability of competing local exchange service providers to receive telephone numbers on a nondiscriminatory basis is critical to the achievement of local dialing parity. We believe that the interconnection requirements that section 251(c)(2) imposes on incumbent local exchange carriers will reduce the likelihood that customers of a competing LEC will have to dial an access code to reach a customer of the incumbent LEC insofar as the two networks are connected. Number portability will ensure that customers switching local service providers will not need to dial additional digits to make local telephone calls. Likewise, allowing every telecommunications carrier authorized to provide local telephone service, exchange access, or paging service in an area code to have at least one NXX in an existing area code also reduces the potential local dialing disparity that may result if competing LECs can only give customers numbers from a new area code. We therefore decline to prescribe now any additional guidelines addressing the methods that LECs may use to accomplish local dialing parity. We also conclude that, contrary to the views expressed by some parties, the

¹⁵⁶ See, e.g., SBC comments at 3 n.4; NEXTLINK comments at 8.

¹⁵⁷ See, e.g., BellSouth comments at 9.

¹⁵⁸ See, e.g., U S WEST comments at 6.

provision of nondiscriminatory access to telephone numbers, by itself, does not fulfill the local dialing parity mandate of section 251(b)(3). Given that acquisition of a central office code by a LEC would not necessarily ensure that the LEC's customers would be relieved of an obligation to dial extra digits, access codes or some other special dialing protocol, the provision of nondiscriminatory access to telephone numbers does not by itself ensure local dialing parity. Rather, we find that under section 251(b)(3) each LEC must ensure that its customers within a defined local calling area be able to dial the same number of digits to make a local telephone call notwithstanding the identity of the calling party's or called party's local telephone service provider.

3. Non-Uniform Local Calling Areas

a. Background

72. The NPRM tentatively concluded that, pursuant to section 251(b)(3), a LEC is required to permit telephone exchange service customers within a defined local calling area to dial the same number of digits to make a local telephone call, notwithstanding the identity of a customer's or the called party's local telephone service provider. The NPRM did not address the potential dialing parity implications of non-uniform local calling areas 160 nor did it address the potential impact of our proposed interpretation of the local dialing parity obligation on local calling area boundaries. 161

¹⁵⁹ NPRM at para. 211.

¹⁶⁰ We use the term "non-uniform local calling area" to refer to a situation in which a telephone exchange service provider's local calling area is either larger or smaller than that of another telephone exchange service provider that is providing telephone exchange service in the same geographic area.

¹⁶¹ Insofar as parties contend that the section 251(b)(3) dialing parity requirements compel the use of a ten-digit dialing plan for

b. Comments

- 73. A number of parties express concern about the potential interrelationship between our proposed interpretation of the local dialing parity requirements and local calling area boundaries. 162 For example, WinStar cautions the Commission that by requiring that customers "within a defined local calling area" be able to dial the same number of digits to make a local telephone call, certain parties may interpret this to require that a competing provider of local exchange service must define its local calling area to match the local calling area of the incumbent LEC.163 GSA/DOD maintains that dialing is not truly at parity if different carriers have different definitions of the geographic areas in which calls can be made with sevendigit dialing.164 To address the potential dialing parity issue that may arise when a new entrant's "network coverage" is more limited than the incumbent LEC's, GSA/ DOD recommends that the Commission adopt rules that ensure that local calling areas are consistently defined for LEC wholesale and retail services, 165
- 74. GTE contends that "[s]o long as new entrants have the technical ability to deploy equipment necessary to offer the same seven-digit dialing as the incumbent LEC, dialing

local calls within an area code overlay (see, e.g., MFS comments at 3-5), we note that these concerns are addressed more fully below in paragraphs 286 through 287.

¹⁶² See, e.g., WinStar comments at 10-11; GSA/DOD comments at 4-5; Florida Commission comments at 3.

¹⁶³ WinStar comments at 10-11 ("The Commission should proceed carefully to ensure that it does not inadvertently limit carriers from experimenting with local calling areas"); see also, U S WEST comments at 6 (where dialing parity disputes arise over fact that local calling areas of two competing LECs do not match, states should resolve such disputes since they are familiar with local calling areas and calling patterns in that state).

¹⁶⁴ GSA/DOD comments at 4.

¹⁶⁵ Id. at 5.

parity should be deemed to exist even if one or more of the new entrants ultimately chooses to provide ten-digit dialing." 166 To illustrate its point that all local calls cannot be dialed using the same number of digits, NYNEX notes that in the New York City Metro LATA local calls span three different area codes, with seven-digit dialing within an area code and ten-digit dialing between area codes. 167 Finally, the Florida Commission expresses concern regarding the potential customer confusion that may result if customers in local calling areas are required to dial ten rather than the currently dialed seven digits to make local "Extended Calling Service" calls. 168

c. Discussion

75. A telephone call requiring seven-digit dialing is not necessarily a local call ¹⁶⁹ and a telephone call requiring ten-digit dialing is not necessarily a toll call. ¹⁷⁰ Disparity in local dialing plans, by itself, does not contravene our interpretation of the local dialing parity requirements unless such plans are anti-competitive in effect. ¹⁷¹ By requir-

¹⁶⁶ GTE comments at 8 n.10.

¹⁶⁷ NYNEX comments at 3 n.6.

¹⁶⁸ Florida Commission comments at 3.

¹⁶⁹ We note that several states permit seven-digit dialing for toll calls. North American Numbering Plan, Area Codes 1996 Update, Bellcore (January 1996) at 14. For example, within the 518 area code a call from Clifton Park, New York to Hague, New York is a toll call that can be dialed with seven digits.

¹⁷⁰ Section 3(48) defines "telephone toll service" as "telephone service between stations in different exchange areas for which there is made a separate charge not included in contracts with subscribers for exchange service." 47 U.S.C. § 153(48). By contrast, charges for calls within a local calling area generally are not assessed on a per call basis. Thus, the construct of local calling areas serves as the basis by which carriers price their services.

¹⁷¹ See, e.g., the discussion at paras. 281-291 regarding the discriminatory and anticompetitive nature of a service-specific or technology-specific overlay in connection with area code relief plans.

ing that all customers "within a defined local calling area" be able to dial the same number of digits to make a local telephone call, we do not intend to require a competing provider of local exchange service to define its local calling area to match the local calling area of an incumbent LEC. We further do not intend to require a competing provider of telephone exchange service that voluntarily chooses to provide ten-digit as opposed to seven-digit dialing in a local calling area to modify its dialing plan in this instance in order to conform to the dialing plan of another LEC. No other commenter addressed GSA's proposal that the Commission adopt rules that ensure that local calling areas are consistenty defined for LEC wholesale and retail services. Therefore, we conclude that the record is insufficient to permit us to take such action at this time.

78. While several commenters urge the Commission to adopt rules for balloting, ¹⁸² the majority of parties urge us to reject this option. ¹⁸³ Parties that oppose balloting argue that such decisions should be left to the individual states ¹⁸⁴ and claim that balloting is confusing to customers, ¹⁸⁵ costly, ¹⁸⁶ and forces consumers to make selections before they might otherwise choose to do so. ¹⁸⁷ Commenters also argue that competition for customers will ensure that carriers notify customers as to how their serv-

¹⁸² See, e.g., NEXTLINK comments at 9; Excel comments at 7.

¹⁸³ See, e.g., Ohio Consumers' Counsel comments at 3; SBC reply at 1; MFS reply at 12; CBT reply at 3-4.

¹⁸⁴ See, e.g., Florida Commission comments at 2; PacTel reply at 13.

¹⁸⁵ See, e.g., Ohio Commission comments at 7.

¹⁸⁶ See, e.g., GTE comments at 13; Sprint comments at 4.

¹⁸⁷ Ameritech comments at 20.

ices can be obtained. 188 In stating its opposition to a balloting requirement, MFS observes that:

the long-distance market today differs markedly from the situation in the mid-1980's, when non-dominant carriers were virtually unknown to most consumers and balloting was mandated as a way of educating consumers to their ability to choose a carrier. No such education is needed today, because most consumers are well aware of their long-distance choices, and the carriers have readily available means of contacting those who are not. 189

c. Discussion

92. We conclude that, in order to ensure that dialing parity is implemented in a procompetitive manner, national rules are needed for the recovery of dialing parity costs. We further conclude that these costs should be recovered in the same manner as the costs of interim number portability, as mandated in our recent Number Portability Order.224 Our authority to promulgate national cost recovery rules derives from section 251(d) of the 1996 Act and section 4(i) of the 1934 Act. In section 251(d), Congress directed the Commission to take the necessary steps to implement section 251. Section 4(i) of the 1934 Act authorizes us to take any action we consider "necessary and proper" to further the public interest in the regulation of telecommunications. Because we determine that dialing parity is crucial to the development of local exchange competition, we conclude that we should establish pricing principles for the recovery of dialing par-

¹⁸⁸ See, e.g., GTE comments at 13; U S WEST comments at 8.

¹⁸⁹ MFS comments at 6.

²²⁴ Telephone Number Portability, FCC 96-286, CC Docket No. 95-116 (July 2, 1996) (Number Portability Order).

ity costs. Accordingly, we reject the arguments of incumbent LECs and others who oppose national standards for cost recovery of the network upgrades required to achieve dialing parity.

- 93. Many of the network upgrades necessary to achieve dialing parity, such as switch software upgrades, are similar to those required for number portability. Moreover, with both dialing parity and number portability, customer inconvenience represents the barrier to effective competition Congress intends to eliminate, whether that inconvenience results from the dialing of extra digits in the case of dialing parity, or notification of family, friends and business contacts when a customer is forced to change his or her number. For these reasons, we determine that our recent Number Portability Order provides guidance regarding which costs incumbent LECs should be able to recover in implementing dialing parity, as well as how such costs should be recovered. The rules adopted in the Number Portability Order apply only to currently-available number portability mechanisms. We sought further comment on cost recovery for long-term number portability, because long-term number portability will involve a different kind of system that currently available solutions. We tentatively concluded that under section 251(e)(2), the same cost recovery principles should apply to longterm number portability. In the case of dialing parity, there is a similar distinction between currently-available solutions (i.e., full 2-PIC presubscription), and long-term solutions (i.e., multi-PIC or smart-PIC methodologies). Like number portability, we may need to revisit the issue of an appropriate cost recovery standard once other presubscription technologies become available on a nationwide basis.
- 94. In the Number Portability Order, we concluded that costs for number portability should be recovered on a

competitivey-neutral basis.226 We also concluded that any recovery mechanism should: (1) not give one service provider an appreciable, incremental cost advantage over another service provider, when competing for a specific subscriber; and (2) not have a disparate effect on the ability of competing service providers to earn a normal return.226 We therefore reject the arguments of those commenters that assert that only new entrants should bear the costs of implementing dialing parity, because such an approach would not be competitively neutral. We also concluded in the Number Portability Order that LECs could only recover the incremental costs of implementing number portability. Because we determine that number portability and dialing parity share significant technical similarities and overcome similar barriers to competition, we conclude that we should impose the same cost standard for dialing parity costs that we have adopted for number portability costs. We therefore agree with AT&T that LECs may not recover from other carriers under a dialing parity cost recovery mechanism any network upgrade costs not related to the provision of dialing parity.

95. In our Number Portability Order, we concluded that the costs of long-term number portability that could be recovered through a competitively-neutral mechanism included installation of number portability-specific switch software, implementation of SS7 and IN or AIN capability, and the construction of number portability databases.²²⁷ We determined that states could use several allocators, including gross telecommunications revenues, number of lines, and number of active telephone numbers, to

²²⁵ Section 251(e)(2) of the 1996 Act states that "the cost of establishing . . . number portability shall be born by all telecommunications carriers on a competitively neutral basis, as determined by the Commission." This statutory provision does not apply to the dialing parity requirement.

²²⁸ Number Portability Order at paras. 121-140.

²²⁷ Id. at para. 122.

spread number portability costs across all telecommunications carriers.228 Applying the same cost recovery principles to dialing parity, we conclude that LECs may recover the incremental costs of dialing parity-specific switch software, any necessary hardware and signalling system upgrades, and consumer education costs that are strictly necessary to implement dialing parity. These costs must be recovered from all providers of telephone exchange service and telephone toll service in the area served by a LEC. including that LEC, using a competitively-neutral allocator established by the state.229 Although, under section 251 (e) (2), number portability costs must be recovered from all telecommunications carriers, section 251(b)(3) only requires that dialing parity be provided to providers of telephone exchange service and telephone toll service. Therefore, we concluded that a competitively-neutral recovery mechanism for dialing parity should only allocate costs to this more limited class. States may use any of the allocators described in the Number Portability Order, or any other allocator that meets the criteria we have established. States should apply the principles we adopt today, and the other guidelines for recovering costs of currently available number portability measures, in establishing more specific cost recovery requirements for dialing parity.

292. Finally, we address petitions for clarification or reconsideration that were filed in the *Ameritech* and *NANP* proceedings. On February 22, 1995, Comcast Corporation filed a Petition for Clarification or Reconsideration of the *Ameritech* Order regarding the Commission's

²²⁸ Id. at paras. 134-36.

²²⁹ We recognize that, unlike the case for number portability costs, states would not be able to establish a cost allocator based on numbers of lines because such an allocator could not apportion costs on a competitively neutral basis where dialing parity is provided to a CMRS provider. We expect that states will establish a competitively neutral allocator that can be used to apportion costs among all providers.

jurisdiction over numbering administration.*10 In its petition, Comcast seeks clarification of the Ameritech Order to the extent that it implies the Commission does not have broad statutory authority over the assignment of numbering resources, and seeks reconsideration of any implication in the Ameritech Order that the Commission's authority is limited by or subordinate to state interests. 620 Because section 251(e)(1) gives the Commission exclusive jurisdiction over numbering matters in the United States, any uncertainty about the Commission's and the states' jurisdiction over numbering administration that may have existed prior to the 1996 Act has now been eliminated. In light of the enactment of section 251(e)(1), Comcast's request that the Commission reconsider its conclusion in the Ameritech Order that the Commission does not retain plenary jurisdiction over numbering issues in the United States is moot. Accordingly, we dismiss Comcast's petition.

343. Section 251(e)(2) requires that the costs of telecommunications numbering administration be borne by all telecommunications carriers on a competitively neutral basis. Contributions based on gross revenues would not be competitively neutral for those carriers that purchase telecommunications facilities and services from other telecommunications carriers because the carriers from whom they purchase services or facilities will have included in their gross revenues, and thus in their contributions to number administration, those revenues earned from services and

Comcast Corporation (February 22, 1995). PageNet and Nextel Communications, Inc. ("Nextel") filed Comments in support of Comcast's petition.

Comcast Petition at 1. According to Comcast, footnote 18 of the Ameritech Order explicitly overruled dicta in a prior Commission decision that stated that the Commission had plenary jurisdiction over CO code allocation. Id. at 3.

facilities sold to other carriers. Therefore, to avoid such an outcome, we require all telecommunications carriers to subtract from their gross telecommunications services revenues expenditures for all telecommunications services and facilities that have been paid to other telecommunications carriers. It should be noted that this requirement is solely for the purpose of determining a carrier's contribution to numbering administration costs and not for any other purpose, interpretation, or meaning of any other Commission rule such as those contained in Parts 32, 36, 51, 64, 65, or 69 of the Commission's rules.

Year 1995, Report and Order, 10 FCC Rcd 13512, at 13558-59 (1995) (Regulatory Fees Order) In the Regulatory Fees Order, we stated that, in order to avoid imposing a double payment burden on resellers, we would permit interexchange carriers to subtract from their reported gross interstate revenues any payments made to underlying carriers for telecommunications facilities or services. Id. Our action here is consistent with that taken in the Regulatory Fees Order. We note that the gross telecommunications services revenues referenced in this discussion are not limited to gross interstate revenues.

UNITED STATES COURT OF APPEALS EIGHTH CIRCUIT

Nos. 96-3321, 96-3406, 96-3410, 96-3414, 96-3416, 96-3418, 96-3424, 96-3430, 96-3436, 96-3444, 96-3450, 96-3453, 96-3460, 96-3507, 96-3519, 96-3520, 96-3603, 96-3604 and 96-3608

IOWA UTILITIES BOARD,

Petitioner,

V.

FEDERAL COMMUNICATIONS COMMISSION; UNITED STATES OF AMERICA, Respondents.

NATIONAL ASSOCIATION OF REGULATORY
UTILITY COMMISSIONERS,
Petitioner,

V

THE SOUTHERN NEW ENGLAND TELEPHONE COMPANY,
Petitioner.

V

FEDERAL COMMUNICATIONS COMMISSION; UNITED STATES OF AMERICA, Respondents.

BELL ATLANTIC CORPORATION;
BELLSOUTH CORPORATION;
PACIFIC TELESIS GROUP,
Petitioners,

V.

FEDERAL COMMUNICATIONS COMMISSION; UNITED STATES OF AMERICA, Respondents.

AMERITECH CORPORATION,
Petitioner,

V.

FEDERAL COMMUNICATIONS COMMISSION; UNITED STATES OF AMERICA, Respondents.

U S WEST, INC.,

Petitioner,

V

GTE SERVICE CORPORATION; GTE ALASKA INCORPORATED; GTE ARKANSAS, INCORPORATED; GTE CALIFORNIA, INCORPORTED; GTE FLORIDA, INCORPORATED; GTE MIDWEST, INCORPORATED; GTE SOUTH, INCORPORATED; GTE SOUTHWEST, INCORPORATED; GTE NORTH, INCORPORATED; GTE NORTHWEST, INCORPORATED; GTE HAWAIIAN TELEPHONE COMPANY, INCORPORATED; GTE WEST COAST, INCORPORATED; CONTEL OF CALIFORNIA, INC.; CONTEL OF MINNESOTA, INC.; CONTEL OF THE SOUTH, INC.,

Petitioners,

V.

FEDERAL COMMUNICATIONS COMMISSION; UNITED STATES OF AMERICA, Respondents.

NEW YORK TELEPHONE COMPANY;
NEW ENGLAND TELEPHONE AND
TELEGRAPH COMPANY,
Petitioners,

V.

FEDERAL COMMUNICATIONS COMMISSION; UNITED STATES OF AMERICA, Respondents.

CINCINNATI BELL TELEPHONE COMPANY, Petitioner,

V.

PEOPLE OF THE STATE OF NEW YORK;
THE PUBLIC SERVICE COMMISSION OF THE
STATE OF NEW YORK,

Petitioners,

V.

FEDERAL COMMUNICATIONS COMMISSION; UNITED STATES OF AMERICA, Respondents.

SBC COMMUNICATIONS, Inc.,
Petitioner,

V.

FEDERAL COMMUNICATIONS COMMISSION; UNITED STATES OF AMERICA, Respondents.

LOUISIANA PUBLIC SERVICE COMMISSION,
Petitioner,

V.

FEDERAL COMMUNICATIONS COMMISSION; UNITED STATES OF AMERICA, Respondents.

FLORIDA PUBLIC SERVICE COMMISSION,
Petitioner,

V.

SOUTH DAKOTA PUBLIC UTILITIES COMMISSION, Petitioner.

V.

FEDERAL COMMUNICATIONS COMMISSION;
UNITED STATES OF AMERICA,
Respondents.

THE PEOPLE OF THE STATE OF CALIFORNIA;
THE PUBLIC UTILITIES COMMISSION OF THE
STATE OF CALIFORNIA,

Petitioners,

V.

FEDERAL COMMUNICATIONS COMMISSION; UNITED STATES OF AMERICA, Respondents.

UNTED STATES TELEPHONE ASSOCIATION,
Petitioner,

V.

FEDERAL COMMUNICATIONS COMMISSION; UNITED STATES OF AMERICA, Respondents.

> RURAL TELEPHONE COALITION, Petitioner,

> > V.

COMPETITIVE TELECOMMUNICATIONS ASSOCIATION,
Petitioner,

FEDERAL COMMUNICATIONS COMMISSION; UNITED STATES OF AMERICA, Respondents.

MISSISSIPPI PUBLIC SERVICE COMMISSION,
Petitioner,

FEDERAL COMMUNICATIONS COMMISSION; UNITED STATES OF AMERICA, Respondents.

> Submitted Oct. 3, 1996 Filed Oct. 15, 1996

Before BOWMAN, WOLLMAN and HANSEN, Circuit Judges.

HANSEN, Circuit Judge.

These cases have been consolidated in this circuit by the September 11, 1996 order of the Judicial Panel on Multidistrict Litigation, Docket No. RTC-31, pursuant to Rule 24 of the Rules of Procedure of the Judicial Panel on Multidistrict Litigation. See 28 U.S.C. § 2112(a) (3) (1994). Numerous petitioners have moved this court for a stay pending judicial review of the Federal Communications Commission's First Report and Order. The FCC promulgated the rules and regulations in its First Report and Order pursuant to its reading of its statutory duty to implement the local competition provisions of the Tele-

¹ First Report and Order, Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, CC Docket No. 96-98 (Aug. 8, 1996) [hereinafter First Report and Order].

communications Act of 1996 (the Act).² This court granted a temporary stay on September 27, 1996, pending oral argument. After hearing oral argument on October 3, 1996, from representatives of the concerned parties, we have decided to stay the operation and effect of only the pricing provisions ³ and the "pick and choose" rule ⁴ contained in the FCC's First Report and Order pending our final determination of the issues raised by the pending petitions for review.

I.

In the Telecommunications Act of 1996, Congress enacted a plan to alter the monopolistic structure of local telephone service markets with an injection of competition. The Act effectively opens up local markets by imposing several new obligations on the existing providers of local telephone service in those markets. The Act refers to the current local providers as "incumbent local exchange carriers" (incumbent LECs). See 47 U.S.C.A. §§ 251(c), (h), 252(j) (West Supp. May 1996). Among other duties, the Act requires incumbent LECs (1) to allow other telecommunication carriers (such as cable television companies and current long-distance providers) to interconnect with the incumbent LEC's existing local network to provide competing local telephone service (interconnection); (2) to provide other telecommunication carriers access to elements of the incumbent LEC's local network on an unbundled basis (unbundled access); and (3) to

² Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (to be codified as amended in scattered sections of 47 U.S.C.).

The pricing provisions refer to First Report and Order. Appendix B-Final Rules §§ 51.501-51.515 (inclusive), 51.601-51.611 (inclusive), 51.707-51.717 (inclusive) and to the default proxy range for line ports used in the delivery of basic residential and business exchange services established in the FCC's Order on Reconsideration, dated September 27, 1996.

The "pick and choose" rule refers to First Report and Order, Appendix B-Final Rules § 51.809.

sell to other telecommunication carriers, at wholesale rates, any telecommunitacions service that the incumbent LEC provides to its retail customers (resale). *Id.* § 251 (c).

To accomplish these directives, the Act places a duty on incumbent LECs to privately negotiate, in good faith, comprehensive agreements with other telecommunication carriers seeking to enter the local market. See id. §§ 251 (c)(1) and 252(a). If the incumbent LEC and the carrier seeking entry are unable to reach a negotiated agreement, either party may petition the respective state utility commission to conduct a compulsory arbitration of the open and disputed issues and arrive at an arbitrated See id. § 252(b). The final agreement, agreement. whether arrived at through negotiation or arbitration, must be approved by the state commission. Id. § 252(e) (1). Certain portions of the Act also require the FCC to participate in the Act's implementation. See, e.g., id. §§ 251(b)(2), (d)(1), (e), 252(e)(5). The FCC's regulations pertaining to the Act form the heart of the controversies at bar.

On August 8, 1996, the FCC released its First Report and Order in which it published its comments and rules regarding the local competition provisions of the Act. The petitioners in this consolidated proceeding, consisting, at the moment, primarily of incumbent LECs and state utility commissions, argue that the FCC exceeded its authority in promulgating these rules. While several of the petitioners object to the FCC's regulations in their entirety, others specifically challenge the FCC's rules regarding the prices that an incumbent LEC may charge an incoming competitor for interconnection, unbundled access to network elements, and resale of its services.

Despite the different approaches, it is clear that all of the petitioners object principally to the FCC's pricing rules. One such rule is a mandate from the FCC that state commissions employ the "total element long-run incremental cost" (TELRIC) method to calculate the costs that an incumbent LEC incurs in making its facilities available to competitors. See First Report and Order, Appendix B-Final Rules §§ 51.503, 51.505. After applying the TELRIC method and arriving at a cost figure, the state commissions, acting as arbitrators, must then determine the price that an incumbent LEC may charge its competitors, based on the TELRIC driven cost figure. See id.

Many of the incumbent LECs object to the TELRIC method for two reasons. First, it does not consider their "historical" or "embedded" costs (costs that an incumbent incurred in the past) in calculating the cost figure to be used to determine the rates. See id. § 51.505(d)(1). Second, it requires that an incumbent LEC's cost be measured as if the incumbent were using the most efficient telecommunication technology currently available, regardless of the technology presently employed by the incumbent and to be used by the competitor. See id. § 51.505(b) (1). The incumbent LECs argue that the TELRIC method underestimates their costs and results in prices that are too low. The incumbent LECs maintain that these low prices would effectively require them to subsidize their competitors and thereby threaten the viability of the LEC's own businesses.

For similar reasons, the petitioners also object to the FCC's proxy rates, which are to be used by the state commissions if they elect not to employ the TELRIC method to set prices. See id. §§ 51.503(b)(2), 51.513, 51.705(a)(2), 51.707. The incumbent LECs argue that these proxy rates do not accurately reflect their costs and are artificially low. In addition to the rules regarding TELRIC and the proxy rates, the petitioners object to several other FCC regulations that pertain to the pricing of intrastate telephone service.

⁵ The state utilities commissions take issue with the "deaveraging" rule requiring them to establish different rates in at least three dif-

Some of the petitioners also seek to stay the FCC's so-called "pick and choose" rule, id. § 51.809, with which the FCC purports to implement § 252(i) of the Act. Section 252(i) requires an LEC to make available any interconnection, service, or network element contained in an approved agreement to which it is a party to any other telecommunications carrier upon the same "terms and conditions" as those provided in the agreement. Here again, price becomes a key issue. When the FCC promulgated its rule, it expanded the statutory language of § 252(i) to include "rates, terms, and conditions." Id. § 51.809 (emphasis added). The petitioners' objection is that the rule would permit the carriers seeking entry into a local market to "pick and choose" the lowest-priced individual elements and services they need from among all of the prior approved agreements between that LEC and other carriers, taking one element and its price from one agreement and another element and its price from a different approved agreement. Moreover, if an LEC and Carrier A, for example, reach an approved agreement, and then the LEC and a subsequent entrant, Carrier B, agree in their agreement to a lower price for one of the elements or services provided for in the LEC's agreement with Carrier A, Carrier A will be able to demand that its agreement be modified to reflect the lower cost negotiated in the agreement with Carrier B. Consequently, the petitioners assert that the congressional preference for negotiated agreements would be undermined because an agreement would never be finally binding, and the whole methodology for negotiated and arbitrated agreements would be thereby destabilized.

ferent geographic areas within each state. See id. § 51.507(f). Many of the incumbent LECs also challenge the FCC's wholesale rate rules, asserting that the FCC's mandated method for calculating these rates, as well as its interim wholesale rates, result in rates that are also too low and threaten the incumbent LEC's viability. See id. §§ 51.607, 51.609, 51.611.

П.

We consider the following four factors in determining whether a stay is warranted: (1) the likelihood that a party seeking the stay will prevail on the merits of the appeal; (2) the likelihood that the moving party will be irreparably harmed absent a stay; (3) the prospect that others will be harmed if the court grants the stay; and (4) the public interest in granting the stay. See Arkansas Peace Ctr. v. Dep't of Pollution Control, 992 F.2d 145, 147 (8th Cir. 1993), cert. denied, 511 U.S. 1017, 114 S.Ct. 1397, 128 L.Ed.2d 70 (1994); Wisconsin Gas Co. v. F.E.R.C., 758 F.2d 669, 673-74 (D.C. Cir. 1985), cert. denied, 476 U.S. 1114, 106 S.Ct. 1968, 1969, 90 L.Ed.2d 653 (1986). Applying these factors to the case at hand leads us to conclude that a stay pending final review of the FCC's pricing and "pick and choose" rules is justified.

A.

In evaluating the likelihood of the petitioners' success on appeal, we note that the petitioners "need not establish an absolute certainty of success." Population Inst. v. McPherson, 797 F.2d 1062, 1078 (D.C. Cir. 1986). Instead, as the actual terms of the test indicate, the petitioners must show that they are "likely" to succeed on the merits. Here, the petitioners allege primarily that the FCC exceeded its jurisdiction by imposing national pricing rules for what is essentially local service. They argue that the text and the structure of the Act give the States, not the FCC, authority over the pricing of intrastate telephone service. After evaluating the contentions of all of the interested parties, we believe that the petitioners present a strong argument that is sufficient to satisfy the first prong.

Historically, the state commissions have determined the rates for intrastate communications services. See Communications Act of 1934, § 2(b), 47 U.S.C. § 152(b) (1994). Subsection 252(d), which indicates that state commissions have the authority to determine "just and

reasonable rates" necessary to nt the local competition provision past practice. This prosection, entitled "Pricing standards," makes no ment of FCC rules on pricing. Moreover, subsection 252(c)(2) directs state commissions to "establish any rates for interconnection, services, or network elements according to subsection (d) of this section." Again, no reference is made to FCC regulations regarding rates. By contrast, where Congress intended for the state commissions to follow FCC rules in arbitrations, it expressly said so. In subsection 252(c)(1), the Act requires state commissions to ensure that their resolutions of arbitrated disputes comply with both section 251 and with the regulations that the FCC is specifically authorized to issue under section 251. But nowhere in section 251 is the FCC specifically authorized to issue rules on pricing. The sections of the Act that directly authorize the state commissions to establish prices are devoid of any command requiring the state commissions to comply with FCC pricing rules (or, for that matter, authorizing the FCC to issue any pricing rules). This absence indicates a likelihood that Congress intended to grant the state commissions the authority over pricing of local telephone service, either by approving or disapproving the agreements negotiated by the parties, or, when the parties cannot agree, through compulsory arbitration, thereby preserving what historically has been the States' role.

We are mindful of the FCC's contrary interpretation of the Act. The FCC asserts that subsection 251(d)(1), when read together with subsection 252(c)(1), authorizes the FCC to establish rules regarding pricing. Subsection 251(d)(1) directs the FCC to complete the promulgation of regulations pursuant to its duties under section 251 by August 8, 1996. The FCC also urges us to read the general provisions of subsection 251(c) together with subsection 252(d) (the pricing standards) and conclude that these portions of the Act supply the FCC with the power to issue pricing rules.

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We recognize that courts must give deference to an agency's reasonable interpretation of an unclear statute. See Chevron U.S.A., Inc. v. Natural Resources Defense Council, 467 U.S. 837, 843-45, 104 S.Ct. 2778, 2781-83, 81 L.Ed.2d 694 (1984). In this case, however, we believe that the petitioners have a better than even chance of convincing the court that the FCC's pricing rules conflict with the plain meaning of the Act, in which case the court would not be bound by Chevron deference and would be entitled to overturn thency's interpretation. See id. at 842-43, 104 S.Ct. at 2781 ("If the intent of Congress is clear, that is the end of the matter, for the court, as well as the agency, must give effect to the unambiguously expressed intent of Congress."); id. at 844, 104 S.Ct. at 2782-83 (indicating that courts should not give controlling weight to regulations that are contrary to the statute). In this, our first look at the issue, we are skeptical that the FCC's roundabout construction of the statute could override what, at first blush, appears to be a rather clear and direct indication in subsections 252(c)(2) and 252 (d) that the state commissions should establish prices.

Moreover, we have serious doubts that the FCC's interpretation of the Act constitutes the straightforward or unambiguous grant of intrastate pricing authority to the FCC sufficient to qualify as an exception to the provisions of subsection 2(b) of the Communications Act of 1934, 47 U.S.C. § 152(b) (1994). See Louisiana Pub. Serv. Comm'n v. FCC, 476 U.S. 355, 377, 106 S.Ct. 1890, 1903, 90 L.Ed.2d 369 (1986). Subsection 2(b) provides that "nothing in this Chapter shall be construed to apply or to give the [FCC] jurisdiction with respect to ... charges, classifications, practices, services, facilities, or regulations for or in connection with intrastate communications service." 47 U.S.C. § 152(b) (1994). In Louisiana, the Supreme Court determined that in order to overcome subsection 2(b)'s limits on the FCC's jurisdiction with respect to intrastate communications service, Congress must "unambiguously" or "straightforwardly"

either modify subsection 2(b) or grant the FCC additional authority. 476 U.S. at 377, 106 S.Ct. at 1903. We acknowledge that portions of the Telecommunications Act of 1996 expressly grant the FCC authority over some aspects of intrastate telephone service. See, e.g., 47 U.S.C.A. § 251(e) (West Supp. May 1996) (FCC authority regarding numbering administration). We have been unable, however, to find such an express grant of authority to the FCC over the pricing of intrastate telephone service, nor does there appear to be a modification of subsection 2(b). The combination of these omissions indicates a sufficient likelihood that the petitioners will succeed on the merits of their appeal. We, of course, remain open to being persuaded that the FCC's read is the correct one when full briefing and argument on the merits have been concluded.

Because we believe that the petitioners have demonstrated that they will likely succeed on the merits of their appeals based on their argument that, under the Act, the FCC is without jurisdiction to establish pricing regulations regarding intrastate telephone service, we think that it is unnecessary at this time to address the remaining theories which the petitioners use to challenge the legality of the FCC's pricing rules.

B.

With respect to the likelihood of irreparable harm, the petitioners initially assert that their interest in productive ongoing negotiations and arbitrations regarding the implementation of the Act will be irreparably harmed if the FCC's pricing regulations are not stayed. They argue that the competitors seeking entry into the local phone markets will refuse even to consider prices that are higher than the FCC's proxy rates and will simply hold out for

⁶ In fact, we are told that a provision which specifically modified subsection 2(b) was expressly rejected by Congress before the bill was passed. See S. 652, 104th Cong., 1st Sess. § 101(c) (1995).

the proxy rates that the States will feel obligated to impose in their arbitrations. In this manner, the proxy rates effectively establish a price ceiling, an observation recognized by the FCC itself, which inevitably confines and restricts the give and take characteristic of free negotiations and arbitrations. The state commissions specifically argue that the FCC's pricing regulations effectively undermine their authority, and if not stayed, the rules will disrupt the predictability and continuity of the existing regulatory system. The state commissions explain that the FCC pricing rules essentially handcuff their discretion in determining the just and reasonable rates in arbitrations required under subsection 252(d)(1).

In order to demonstrate irreparable harm, a party must show that the harm is certain and great and of such imminence that there is a clear and present need for equitable relief. See Packard Elevator v. I.C.C., 782 F.2d 112, 115 (8th Cir. 1986), cert. denied, 484 U.S. 828, 108 S.Ct. 98, 98 L.Ed.2d 59 (1987) (quoting Wisconsin Gas, 758 F.2d at 673-74). The FCC asserts that the petitioners' allegations of irreparable harm are merely speculative and that there is no certainty that its proxy rates will ever be applied to the petitioners. We are persuaded, however, by the petitioners' evidence that the negotiations preferred by the Congress are already breaking down due to the competitors' desire to hold out for the FCC's proxy rates. Moreover, given the time constraints under the Act, some state commissions have already felt obliged to impose the proxy rates in their arbitrations. These experiences indicate that the FCC's pricing rules will derail current efforts to negotiate and arbitrate agreements under the Act, and the "pick and choose" rule will operate to further undercut any agreements that are actually negotiated or arbitrated. The inability of the incumbent LECs and the state commissions to effectively negotiate and arbitrate agreements free from the influence of the FCC's pricing rules, including the "pick and choose" rule, will irreparably injure the interests of the petitioners. If the FCC's rules are later struck down, it will be extremely difficult for the parties to abandon the influence of their previous agreements that were based on the national pricing rules and to recreate the atmosphere of free negotiations that would have existed in the absence of the FCC's dictated presumptive prices. Without a stay, the opportunity for effective private negotiations will be irretrievably lost. We initially believe that this result would be contrary to Congress's intent that these matters be resolved through negotiation and/or arbitration.

The petitioners also argue that the FCC's pricing rules will force the incumbent LECs to offer their services to requesting carriers at prices that are below actual costs, causing the incumbent LECs to incur irreparable losses in customers, goodwill, and revenue. The FCC contends that its pricing rules, in particular its proxy rates, are merely an option for the parties and the state commissions to consider, and consequently the petitioners cannot make a showing that the harm is certain and imminent, as required in Packard Elevator, 782 F.2d at 115. As we explained above, we are persuaded that, absent a stay, the proxy rates would frequently be imposed by the state commissions and would result in many incumbent LECs suffering economic losses beyond those inherent in the transition from a monopolistic market to a competitive one. We are mindful of the precedents that declare that "economic loss does not, in and of itself, constitute irreparable harm," Wisconsin Gas, 758 F.2d at 674, and that "revenues and customers lost to competition which can be regained through competition are not irreparable." Central & S. Motor Freight Tariff Ass'n v. United States, 757 F.2d 301, 309 (D.C. Cir. 1985), cert. denied, 474 U.S. 1019, 106 S.Ct. 568, 88 L.Ed.2d 553 (1985). Both of these propositions, however, rest on the assumption that the economic losses are recoverable. The threat of unrecoverable economic loss, however, does qualify as irreparable harm. See Baker Elec. Coop., inc. v. Chaske, 28 F.3d 1466, 1473 (8th Cir. 1994); Airlines Reporting Corp. v. Barry, 825 F.2d 1220, 1227 (8th Cir. 1987). In this case, the incumbent LECs would not be able to bring a lawsuit to recover their undue economic losses if the FCC's rules are eventually overturned, and we believe that the incumbent LECs would be unable to fully recover such losses merely through their participation in the market. Moreover, the petitioners' potential loss of consumer goodwill qualifies as irreparable harm. See Multi-Channel TV Cable Co. v. Charlottesville Quality Cable Operating Co., 22 F.3d 546, 552 (4th Cir. 1994) (holding that the possibility of permanent loss of customers to a competitor or the loss of goodwill satisfies the irreparable injury prong). For the foregoing reasons, we believe that the petitioners have adequately demonstrated that they will be irreparably harmed if a stay of the FCC's pricing rules is not granted.

C.

In assessing whether others will be harmed if the court grants the stay, we acknowledge that our decision, either way, will unavoidably adversely affect the interests of either the incumbent LECs or their potential competitors. If we decide to grant the stay, we recognize that the companies seeking entry into the local telephone markets will have to negotiate and arbitrate their agreements without the added leverage of the FCC's pricing rules, and assuming that the FCC's rules were later upheld, they would likely renegotiate the terms of their agreements. The inconvenience of this scenario, however, is outweighed by the harm and difficulties of its alternative, discussed in the previous section. In other words, we think that it would be easier for the parties to conform any variations in their agreements to the uniform requirements of the FCC's rules if the rules were later upheld than it would be for the parties to rework agreements adopted under the FCC's rules if the rules were later struck down. Consequently, we conclude that any harm that other parties may endure as a consequence of imposing a stay is outweighed by the irreparable injury that the petitioners would sustain absent a stay.

D.

The FCC argues that a stay would not promote the public interest because it would not maintain the status quo and it would block the road to competiton in local telephone service markets. We reject both contentions. Before the FCC published its regulations pursuant to the Act, several incumbent LECs, potential competitors, and state utility commissions were all working together to implement the local competition provisions of the Act. The Act's system of private negotiation backed by state-run arbitration was operating without the input from the FCC. A stay would preserve the continuity and stability of this regulatory system—a system that has initially proved to be successful. The FCC asserts that without its pricing regulations in effect, the incumbent LECs will be able to exert their superior bargaining power over their potential competitors and impose unreasonable rates for their services. This argument ignores the empirical success that private parties and the state commissions have had in implementing the local competition provisions of the Act. It also denigrates the proven ability of the state commissions to prevent incumbent LECs from charging excessive rates for their services. The Act requires rates to be just and reasonable and it authorizes state commission to enforce these

We note that some states, Connecticut, Florida, and Iowa in particular, have already established rates based on local conditions and are already involved in opening up their local markets to competition under both the federal Act and state statutes which foreshadowed the new federal law. Moreover, the FCC-imposed rate for Iowa is substantially higher than the state-set rate which was based on the full record from a contested case proceeding, while in Florida, the FCC proxy rate is substantially lower than the state-set rate.

requirements. Presently, we have no reason to doubt the ability of the state commissions to fulfill their duty to promote competition in the local telephone service markets and thus conclude that the public interest weighs in favor of granting a stay.

Ш.

Having concluded that the petitioners satisfy the four requirements for granting a stay, we grant the petitioners' motion to stay the FCC's pricing rules and the "pick and choose" rule contained in its First Report and Order pending a final decision on the merits.

Upon the filing of this order, the stay imposed by our order of September 27, 1996, is dissolved, and is replaced by the stay imposed by the terms of this order.

The stay pertains only to §§ 51.501-51:515 (inclusive), 51.601-51.611 (inclusive), 51.701-51.717 (inclusive), § 51.809, and the proxy range for line ports used in the delivery of basic residential and business exchange services established in the FCC's Order on Reconsideration, dated September 27, 1996.

FCC 97-295

FEDERAL COMMUNICATIONS COMMISSION WASHINGTON, D.C. 20554

CC Docket No. 96-98

IN THE MATTER OF
IMPLEMENTATION OF THE LOCAL COMPETITION
PROVISIONS IN THE TELECOMMUNICATIONS ACT
OF 1996

CC Docket No. 95-185

INTERCONNECTION BETWEEN LOCAL EXCHANGE
CARRIERS AND COMMERCIAL MOBILE RADIO
SERVICE PROVIDERS

THIRD ORDER ON RECONSIDERATION AND FURTHER NOTICE OF PROPOSED RULEMAKING

Adopted: August 18, 1997 Released: August 18, 1997

FNPRM Comment Date: October 2, 1997 FNPRM Reply Date: October 17, 1997

By the Commission: Chairman Hundt issuing a separate statement.

30. Finally, we note that, traditionally, shared facilities are priced on a usage-sensitive basis, and dedicated facili-

ties are priced on a flat-rated basis. We believe that this usage-sensitive pricing mechanism provides a reasonable and fair allocation of cost between the users of shared transport facilities. For example, in the Access Charge Reform Order, specifically the sections dealing with rate structure issues for interstate access charges, we required that the cost of switching, a shared facility, be recovered on a per minute of use basis, while the cost of entrance facilities, which are dedicated to a single interexchange carrier, be recovered on a flat-rated basis.83 We note that several state commissions, in proceedings conducted pursuant to section 252 of the Act, have required incumbent LECs to offer shared transport priced on a usage-sensitive basis.84 We acknowledge that, under the Eighth Circuit's decision, we may not establish pricing rules for shared transport. However, in situations where the Commission is required to arbitrate interconnection agreements pursuant to subsection 252(e)(5), we intend to establish usage-sensitive rates for recovery of shared transport costs unless parties demonstrate otherwise.85

. . . .

34. We also note that the failure of an incumbent LEC to provide access to all of its interoffice transport facilities on a shared basis would significantly increase the requesting carriers' costs of providing local exchange

⁸³ Access Charge Reform, First Report and Order, CC Docket 96-262, FCC 97-158 (rel. May, 16, 1997) (Access Charge Reform Order) at paras, 135, 153.

⁸⁴ See, e.g., Michigan Public Service Commission, Case No. U-11280, July 14, 1997, Order at 26; Public Service Commission of Wisconsin, Case No. 6720-TI-120, Findings of Fact, Conclusions of Law, and Second Order, May 30, 1997.

⁸⁵ See 47 U.S.C. § 252(e)(5). See also Local Competition Order, 11 FCC Red at 16127-32, paras. 1283-95 (giving notice of certain minimum procedural rules and substantive standards that the Commission will use if it assumes jurisdiction pursuant to section 252(e)(5)).

service and thus reduce competitive entry into the local exchange market. In the Local Competition Order, we observed that:

By unbundling various dedicated and shared interoffice facilities, a new entrant can purchase all interoffice facilities on an unbundled basis as part of a
competing local network, or it can combine its own
interoffice facilities with those of the incumbent LEC.
The opportunity to purchase unbundled interoffice
facilities will decrease the cost of entry compared to
the much higher cost that would be incurred by an
entrant that had to construct all of its own facilities.
An efficient new entrant might not be able to compete if it were required to build interoffice facilities
where it would be more efficient to use the incumbent
LEC's facilities.

We continue to find the foregoing statements to be true with respect to shared as well as dedicated transport facilities. Requesting carriers should have the opportunity to use all of the incumbent LEC's interoffice transport facilities. Moreover, the opportunity to purchase transport facilities on a shared basis, rather than exclusively on a dedicated basis, will decrease the costs of entry.

35. We believe that access to transport facilities on a shared basis is particularly important for stimulating initial competitive entry into the local exchange market, because new entrants have not yet had an opportunity to determine traffic volumes and routing patterns. Moreover, requiring competitive carriers to use dedicated transport facilities during the initial stages of competition would create a significant barrier to entry because dedicated transport is not economically feasible at low penetration rates. In addition, new entrants would be hindered by significant transaction costs if they were required to contin-

⁹⁴ Local Competition Order, 11 FCC Red at 15718-19, para. 441 (emphasis added).

ually reconfigure the unbundled transport elements as they acquired customers. We note that incumbent LECs have significant economies of scope, scale, and density in providing transport facilities. Requiring transport facilities to be made available on a shared basis will assure that such economies are passed on to competitive carriers. Further, if new entrants were forced to rely on dedicated transport facilities, even at the earliest stages of competitive entry, they would almost inevitably miscalculate the capacity or routing patterns. We recognize, however, that the need for access to all of the incumbent LEC's interoffice facilities on a shared basis may decrease as competitive carriers expand their customer base and have an opportunity to identify traffic volumes and call routing patterns. We therefore may revisit at a later date whether incumbent LECs continue to have an obligation, under section 251(d)(2), to provide access to all of their interoffice transmission facilities on a shared, usage sensitive basis.95

43. We reject as well Ameritech's contention that a network element must be identifiable as a limited or pre-identified portion of the network. We find nothing in the statutory definition of network elements that prohibits requesting telecommunications carriers from seeking access to every transport facility within the incumbent's network. Our definition of signalling as a network element does not require requesting carriers to identify in advance a particular portion of the incumbent LEC's signalling facilities, but instead permits requesting carriers to obtain access to multiple signalling links and signalling transfer points in

⁹⁵ We note that, if, in the future, competitive carriers gain sufficient market penetration to justify obtaining dedicated transport facilities, either through the use of unbundled elements or through building their facilities, shared transport may no longer meet the section 251(d)(2) requirements. In that event, the Commission can evaluate at that time whether incumbent LECs must continue to provide access to shared transport as a network element.

the incumbent LEC's network on an as-needed basis. 310 We also reject Ameritech's assertion that shared transport cannot be physically separated from switching. 121 Both dedicated and shared transport facilities are transport links between switches. These links are physically distinct from the end office and tandem switches themselves.

44. Although we conclude that shared transport is physically severable from switching, incumbent LECs may not unbundle switching and transport facilities that are already combined, except upon request by a requesting carrier. Although, the Eighth Circuit struck down the Commission's rule that required incumbent LECs to rebundle separate network elements,112 the court nevertheless stated that it: "upheld the remaining unbundling rules as reasonable constructions of the Act, because, as we have shown, the Act itself calls for the rapid introduction of competition into the local phone markets by requiring incumbent LECs to make their networks available to . . . competing carriers." 113 Among other things, the court left in effect section 51.315(b) of the Commission's rules, which provides that, "[e]xcept upon request, an incumbent LEC shall not separate requested network elements that the incumbent LEC currently combines." 114 Therefore, although incumbent LECs are not required to combine transport and switching facilities to the extent that those elements are not already combined, incumbent LECs may not separate such facilities that are currently

¹¹⁰ See generally Local Competition Order, 11 FCC Rcd at 15738-41, paras. 479-483.

Relations, Ameritech, to William Caton, Acting Secretary, FCC, attaching Supplemental Rebuttal Testimony of David H. Gebhardt at 2 (Gebhardt Supplemental Rebuttal Testimony).

¹¹² Iowa Utilities Bd. at *25. See also 47 C.F.R. § 51.315(c)-(f) (vacated rules).

¹¹⁸ Iowa Utilities Bd. at *28.

^{114 47} C.F.R. § 51.315(b).

combined, absent an affirmative request. In addition to violating section 51.315(b) of our rules, such dismantling of network elements, absent an affirmative request, would increase the costs of requesting carriers and delay their entry into the local exchange market, without serving any apparent public benefit. We believe that such actions by an incumbent LEC would impose costs on competitive carriers that incumbent LECs would not incur, and thus would violate the requirement under section 251(c)(3) that incumbent LECs provide nondiscriminatory access to unbundled elements. Moreover, an incumbent LEC that separates shared transport facilities that are already connected to a switch would likely disrupt service to its own customers served by the switch because, by definition, the shared transport links are also used by the incumbent LEC to serve its customers. Thus, incumbent LECs would seem to have no network-related reason to separate network elements that it already combines absent a request.

47. We also disagree with Ameritech's and BellSouth's argument that defining the unbundled network element shared transport as all transport links between any two incumbent LEC switches would be inconsistent with Congress's intention to distinguish between resale services and unbundled network elements. Section 251(c)(3) requires incumbent LECs to make available unbundled network elements at cost-based rates; sections 251(c)(4) and 252(d)(3) require incumbent LECs to make available for resale, at retail price less avoided costs, services the incumbent LEC offers to retail users. In the Local Competition Order, we held that a key distinction between section 251(c)(3) and section 251(c)(4) is that a requesting carrier that obtains access to unbundled network elements faces greater risks than a requesting carrier that only offers services for resale.124 A requesting carrier that takes a network element dedicated to that carrier, and

¹²⁴ Local Competition Order, 11 FCC Rcd at 15668-69, para. 334.

recovered on a flat-rated basis, must pay for the cost of the entire element, regardless of whether the carrier has sufficient demand for the services that the element is able to provide. The carrier thus is not guaranteed that it will recoup the costs of the element. By contrast, a carrier that uses the resale provision will not bear the risk of paying for services for which it does not have customers. 128 In particular, a requesting carrier that takes an unbundled local switch must pay for all of the vertical features included in the switch, even if it is unable to sell those vertical features to end user customers.126 Requesting carriers that purchase shared transport as a network element to provide local exchange service must also take local switching, for the practical reasons set forth herein, and consequently will be forced to assume the risk associated with switching.197

¹²⁵ Iowa Utilities Bd. at *26-27.

¹²⁸ Local Competition Order, 11 FCC Rcd at 15707-08, para. 414.

switches, rather than unbundled local switches obtained from an incumbent LEC, to provide local exchange and exchange access service would use dedicated transport facilities to carry traffic between its network and the incumbent LEC's network. Thus, the only carrier that would need shared transport facilities would one that was using an unbundled local switch.

SEPARATE STATEMENT OF CHAIRMAN REED HUNT

RE: Implementation of the Local Competition Provisions of the Telecommunications Act of 1996; Third Order on Reconsideration and Further Notice of Proposed Rulemaking

The Commission today reaffirms and clarifies a very important aspect of our Local Competition Order: the ability of a competitive local exchange carrier to obtain transport on a shared basis from the incumbent local exchange carrier. More fundamentally, this decision highlights the importance we place on incumbents making available to new entrants their network elements on a combined basis—a combination sometimes referred to as the UNE platform.

In the Telecommunications Act of 1996, Congress mandated that new entrants into the formerly monopolized local exchange market have the ability to choose any or all of three entry strategies: interconnection, resale and unbundled network elements. Congress correctly foresaw that new entrants would need these flexible strategies if they are to compete successfully with the incumbents and their extraordinary economies of scale and scope.

In its decision last month, the Eighth Circuit explicitly affirmed our authority under the Act to define unbundled network elements. This is a very important aspect of our local competition policies. Where the purpose or effect of moves by an incumbent LEC to break apart currently combined elements is to create a barrier to competition, we will take action to tear down or prevent the erection of such barriers.

[AT&T Logo]

(Infocenter Feature Story

Intranet AT&T)

AT&T INVESTMENT COMMUNITY MEETING

Transcript
March 3, 1997—AM Session

JOHN ZEGLIS: Okay, Thank you John. The subject is public policy. Like it or not, public policy still plays a very large role in AT&T's current operations and particularly its future aspirations. That's pretty much a function of where we've come from as a regulated utility. It's almost equally a function of where we want to go into regulated monopoly markets. It means we've had to seek a lot of change in the public policy arena. And my purpose here this morning is to persuade you that our program for this public policy work is not nearly as helter skelter as the briefs and the counter briefs, charges and counter charges may make you think on a daily basis. We have structured our initiatives in the public policy arena around these four central strategic objectives. Number one, we need to eliminate the unnecessary regulation of AT&T. That means there has been too much of it and it's been lopsided against us and in favor of our competitors. Number two, we need to open monopoly markets to new entry. That means the local exchanges in the United States and just about any other country outside this nation.

Number three, until we get those markets open, we need to enforce monopoly safeguards. The most celebrated here is clearly the MSJ like safeguard in the United States; no RBOC long-distance entry until their markets are competitive.

And then the fourth goal, also until we get those monopoly markets made competitive, is to use public policy to bring down this exorbitant 15 dollar carrier-to-carrier pay-

ment bill that we lug around? We call that access domestically and international settlement rates globally.

So the modus operandi for this talk is to look at those four objectives. We'll do all of them domestically first. We'll double back and do them internationally at the end.

We're going to talk about where we stand today, where we're going to go, what are the big plays this year and next, and in the end what kind of market framework can we deliver to AT&T for us to execute on our strategy.

All right. Number 1, deregulation of AT&T. This is the most fun because it's essentially done. We have had to seek this relief at two levels, state and federal. State as a practical matter we were done with long-distance regulation of our prices and earnings by the end of the 1980s. Further good news from the state, we're seeing no inclination to resume regulation of AT&T's new local service operations in a few of the states where nondominant by statute. In most of the others the commissions look like treating us for what we are. The second, third, fourth new entered with zero market share and not in need of any kind of traditional public utility regulation.

At the federal level, at the FCC this has been a tougher nut. And if you follow this, you know we've spent the 1990's peeling off the wraps a layer at a time.

The progression is also well-known to most of you. We've gone from rate of return to price caps to streamline tariffs to contract tariffs to nondominant domestically, to nondominant internationally and now we're even up to detariffing. And now we've got an adjustment to make in the course as to whether that's mandatory or whether we can use tariffs where it makes sense. The point of it all is that AT&T, state and federal, has now escaped active regulation of our prices, our earnings and our services. Along the way we've thrown off some ancillary wraps having to do with network disclosure, regulatory accounting rules, we've got a little mop up to do here. There is some

bundling rules out of the old computer inquiry two, prohibition of equipment and services going together. We need to work off some safety nets, improve some deaveraging rules. None of that is seriously getting in our way right now. The asymmetric regulation is completely gone. We're the same as MCI, Sprint and the other long-distance companies. We're better than the local exchange carriers whose markets we're entering. Truth is we'll probably always be subject to regulations at some level. But this is pretty close to about what we want say that regulation on AT&T is no longer a significant constraint on our strategy or its execution.

So I think the thing to do is to get off of that one and go onto numbers 2 and 3. These are more interesting because they are work in progress and they involve some heavy lifting still for the company and the industry. Recognize that the numbers 2 and 3 here are two sides of the same coin, opening the local exchanges and prohibiting the RBOC long-distance entry until we do. And since February of 1996 this has been pretty much a story of the new Telecom Act. We're going to look at these two objectives separately. But we ought to also recognize the critical interdependency that the act created. Prior to 1996 we had a serious policy disconnect on these two objectives. You had Judge Green deciding on long-distance entry for the RBOC, but he couldn't touch the local exchanges. You had the State deciding on local exchange entry, but they couldn't do anything about RBOC longdistance. And so the AT&T nightmare in all of this was that the MFJ relief would come out of sequence. That is, the courts would finish tearing down the MFJ and opening our long-distance market before the state had finished the job opening the local. And that's why the 1996 act is such a great relief to us. It connected the two objectives, it commanded the opening of local first, and only then do the RBOCs come out into long-distance. And now we're engaged in the key to its implementation,

namely we got to get the sequence correct so that the incentives stay in the right place.

All right. On that score, how are we doing? Well, I think as Bob told you, 1996 was the year of getting the rules in place for this new local entry. And our Congress dictated the order of events. The February Telecom Act gave us some standards. The FCC rule making in August gave us some more. Carrier negotiations in the spring and summer were to iron out some of the wrinkles and we were to go to the state commissions for arbitration for the final rules in the fall and winter. We had a surprise along the way, known as the 8th Circuit Court of Appeals. Got that stay in October and we're looking for a decision in April or May. But as it's turned out that may not be as important as we first thought, because the pace of decision-making, the number of decisions and especially their content in the hands of the state has worked out almost exactly as we expected and more importantly as we hoped for. So we're going to take a look at that now. And I want to tell you we're going to use a coverage metric here that goes by access lines. That recognizes that a decision in a small state isn't as valuable to us as a decision in a large state. And it begins by showing you that we have 98 percent of the access lines covered by either final negotiations in arbitrations or those that are in progress. We've done 81 percent complete. That comes out of nearly 50 arbitrations and that covers 120 million lines. We're going to finish up another 17 percent in 1997. That's some 30 odd arbitrations over 25 million lines. The two percent there are either exempt rural local exchange carriers or places that we don't think we need to be.

About half of that solid blue is on appeal to the district court. Frankly I think we'll make it all of the blue on one side or the other.

And only eight of these arbitrations are actually resulted in signed agreements with AT&T. That's because after you get the decision, you are sent back to the bargaining table to implement principles and to finish the details, not always a quick task.

All right. If that's our coverage, how about our results? Well, the most celebrated issue in these arbitrations is always reselling. Reselling all or a piece of the local exchange carrier's services and networks. And there are two ways to resell under the act. One is the total service, that's what we call total service resale, TSR. And let's look at this one first because the act gave us the formula for the wholesale discount. It said you take the RBOC or the nonRBOC retail price back out of voided costs and properly applied to the FCC that ought 3 bring you out roughly in a range of 17 to 25 percent. How did we do here? First the RBOC territory. Terrific results, 91 percent of those lines are in or better than the FCC range. We're 102 million lines covered within that proxy range or a little better.

We've got five percent of six million lines underneath it. Utah, with seven or eight percent on the resale discount. And if you look at how these things distribute, you would see that we've got a major cluster there in the 20 to 22 percent range, and way out there on the right, take a bow to the national champion, the District of Columbia has a discount rate of 31.4 percent.

Quickly into GTE territory we've got another story going here. We have 52 percent of GTE lines where we've litigated in that discount range. 44 percent of the time we're out of it. That's about 7 million lines. If you live in California, Florida, Oklahoma, Ohio, you ought to be embarrassed.

Another way to resell, and one that figures prominently in our plans, is what we've been calling the unbundled network element. And here if anything we've got a better story coming out of the arbitration. First, everybody who has addressed the issue everywhere is giving us the full unbundling that the FCC called for in its August intercon-

nect order. That means we can get at the elements, at the features and the functions and the ILEC network piecemeal. That includes the vertical features of the switch. We can pick and choose what we need.

Second piece of real good news. Not only can we have them individually, we can buy the elements, put them all back together, create local service out of it, something we call the unbundled network element platform, UNE P. If you can remember that we'll speed up the presentation. But 92 percent of the lines coming out of these arbitrations are eligible for recombination in the way I described, and we will be appealing intensely Georgia, Tennessee, Louisiana and Alabama, where it is not permitted. Nice work Bell South, but you're going to get reversed.

All right. Next issue, what price for these unbundled elements? Well, more good news. Most of the decisions have come out in favor of a pricing methodology that uses longrun incremental forward looking costs. There are a few hybrids in the mix, but the nice part of this is no decision uses the embedded backward looking costs to price these network elements. Again, how are we doing? RBOCs first. We have 94 percent of the RBOC arbitrated lines covered by that forward looking cost methodology, and when you put that methodology onto the costs and the elements in the RBOC territory, it turns out that something like 74 percent of the prices—this is loop prices -come out near or below what the FCC eestimated would be the case when it issued its August order. These are called proxy prices and they were guesstimates based upon what the forward looking cost methodology would produce. Better pause and acknowledge the national champion, Illinois. 43 percent of the FCC loop proxy. You can get a loop in downtown Chicago for \$3.72 a month.

Again, GTE, a little different, this is kind of an amazing story. We have 81 percent of those GTE lines have been arbitrated to use the forward looking cost methodology.

Let's put that cost methodology on the actual cost, going forward, and what do we get? Wow. Only 28 percent of the lines fall within that FCC proxy projection, something like 60 odd percent of the lines are outside it, makes you wonder whether they really are high cost. Also going to have to do something about some attempts to put non-recurring charges on us when we win customers in this manner. Those aren't cost based and we're in the process early this year of litigating any such charges back to cost.

Good news I guess is that the business case for using this unbundled platform is going to turn out to be a lot less sensitive to the pricing results than TSR. And that's where I want to move next. I would like to line up for you the economics of TSR on the one hand and unbundled network elements on the other hand in AT&T's strategy and business case.

We're going to start in the State of Pennsylvania, where like other places, TSR margins are modest. This is a good state for us. This is one where our wholesale discount is 25.9 percent. And when you stack the revenue next to the cost, you see that for a consumer averaging 20 dollars of local exchange service in Pennsylvania, we have a cost of goods sold of \$14.81. Gives you a chance to market a combined local and long-distance package to this customer, gives you a fighting chance perhaps of recovering your marketing and billing and customer care costs incrementally to what you're already doing for long-distance. But it's tight. I guess what you say is it's a lot better than it used to be in Rochester where on that trial we have began to a five percent discount and the pink stack would have been 19 bucks.

But now let's look at the unbundled network element platform in the same state. We'll stay in Pennsylvania. Admit it's a good state for us. We're going to go into a high density, low Uni price zone. We're going to buy all the elements, recombine them to make global service out of the elements and assume we're doing this to a consumer that buys \$25 of long-distance and five dollars of local toll service per month. And now what we end up with, stacked next to it, is quite a different picture. Our cost of goods sold on that platform is \$16.03, slightly above the TSR cost. But our revenue is \$33.50. Consisting of that same 20 dollars in local that we collect and \$3.50 in the interstate subscriber line charge, which under FCC rule comes to the provider under the platform, and 10 dollars worth of access, which was otherwise being paid to the local carrier on the 30 dollars of toll this customer was using. So we have widened our margin on the UNE P by more than twelve bucks over what we had on the TSR side.

Where this company assigns this margin, how you assess this business opportunity, depends upon what business you think we're in at AT&T. If you're a division that thinks your business is local exchange service, that is, you're after the 20 dollars, then you say, wow, I've got an all in, net cost of service that is defrayed by that extra revenue I collected, taking that away from the 16 dollars, I'm not paying more than 2 and a half dollars all in for the cost of goods sold to let me go chase the 20 dollars.

A little more accurate way of looking at our local business might say it's not local exchange. It's local network. We're going to change all the revenues that move over local network facilities. In that case I just bought a \$33.50 revenue screen for \$16.03 cost of goods sold, a discount of 52 percent. Or if you're in one of our sister divisions, say Gail McGovern's consumer long-distance, she might look at it differently. She might say, Good. For the same \$16 that Harry Bennett paid to earn his 23.50 of end user collection, I just had my access reduced by \$10. I improved my margin on a \$30 toll customer by \$10 because I don't have to pay access anymore outside the company. And Harry still has the distance between 16 dollars and 23.50 to recover his further costs, which is a 32 percent discount in and of itself. Or if you're Bob Allen you say, I don't care how you all allocate those costs among the divisions, it's all mine. And what I see is a 53.50 cent revenue screen, we saved 30 dollars of toll revenue, we add 23.50 of local revenue, and we traded that crushing permanent access cost for a platform cost, plus a little bit of intercity transport cost represented by those yellow dots.

None of this by the way is to say that we can't make some business out of the TSR side of it. On the TSR side, you still have some very attractive long-distance customers, in this case the same \$30 toll customer stacked up on top of that local revenue and that local cost. But now you're still paying access, which is why the pink bar goes up as much as it does. And you've lost your opportunity at 3.50 cents for the subscriber line connection recovery. Just another way of showing that your 13.50 better off on the right-hand side then you are on the left-hand side. And you know, this can go on for a long time. We could really have fun. How about a 75 dollar toll customer with five dollars of intrastate, intra-LATA toll? Now you move your cost of goods up to 19 dollars but you move your true local collections to 50. I'm dealing with a 64 percent discount, as you see, the higher the toll usage the more pronounced advantage of this platform. And you've got lots of room in there for some sensitivity around the existing costs and prices of the platform.

Having said all that, I want to suggest that none of this is the right way to look at the new AT&T's business. We are more than an all distance business. On top of that all distance stack of revenue we intend to add Internet service, information services, we intend to add anything that requires local connectivity. And we can do it without adding local connectivity costs. It's simply a matter of putting a couple extra pennies on the transport, but the basic connectivity platform stays there in the solid pink. It makes you look at our business in a different way. It's a two-fold business. We're local connectivity and its platform costs and anything and everything that comes after that connectivity.

Clearly there are huge advantages to that kind of business when you use the unbundled platform. It makes that local all distance service much more attractive, makes use indifferent to what happens in access for Interest, gives us an outlet for the new services, let's us work down the pink costs by replacing the RBOC elements with our own switch or our own wireless loop when the economists say so or when we want to differentiate our services. Frankly, all of us, you and the business are probably going to have to work on a different way to keep score. We aren't going to be able to allocate that connectivity cost among our businesses any more decisively and definitively than we've been able to allocate the cost of the local loop for 125 years in the industry.

Look, with all that opportunity, what are the public policy threats to AT&T's going forward business? One I hear most asked about is the eight circuit. And sure some national uniformity would be useful if we can get the FCC's jurisdiction restored in that appeal. But most of us are a lot less concerned than we used to be about what's going to come out of St. Louis. The first piece of the business model we've been looking at here, rest on the unbundling of network elements. And that's something that congress built into the new Telecom Act. That's not something the courts can say we don't want. Congress said, you got to have unbundling. So that's the law. And we feel pretty secure about that one.

The second piece of this model depends importantly on a principle that says, you don't pay access if you provide service over an unbundled element platform. Again, that's within the FCC's interstate access jurisdiction. That isn't a local entry matter. Probably that's not even properly before the 8th circuit right now. At least to the 70 percent of access that is interstate. And by the way, the 30 percent that is intrastate so far most of the states with only a few exceptions have gone along with the FCC rule and said no, you don't select intrastate access either when

you're providing a platform and not a per minute connection charge.

So what we ended up with in the 8th circuit was a lot of arguments over jurisdiction; fed or state. The state as it turns out did just fine without that preemptive federal jurisdiction. Perhaps it was seeing those results, perhaps it was doing the math on the platform. But the exchange carriers in the full argument added some substantive pricing challenges to their appeal. They say you can't use the combined elements for local, you can't use forward looking costs. That's unconstitutional or prohibited by the statute. It wouldn't be serious, at least more serious if we got a reversal on those grounds. But frankly the states did not join those challenges. The bulk of the argument has been on jurisdiction and we feel good about our chances on the substantive issues in the appeal.

Let me say here the biggest threat to this kind of business plan probably isn't public policy directly. The biggest threat is really implementation. Can we get at this stuff? Can we order it? Can the local exchange carriers provision it? What we have, incidentally, are the commissions doing their part again. 95 percent of the access lines are subject to orders that the local exchange carrier provide us with electronic interfaces for ordering and provisioning the elements and the service. Not only automated but at parity with the way the LEC provisions its own customers, through its own systems. We're getting the right rules in place about this, too, in the regulatory arena, but are the exchange carriers ever going to get us up and running? Well, we would say that depends in the first instance on incentive. And to show you the advantage of getting the incentives right, we have to return to the sad case of GTE, which illustrates the point for any nonRBOC territory. The Telecom Act didn't get it quite right here. They left GTE free to get into the long-distance business, even as it continues its local exchange monopolies, and they are accumulating customers rapidly. They have got no incentives to cooperate with anybody else in getting those exchanges open. Quite the contrary, the longer they're closed the better it is. They're the most active challenger of the Telecom Act. They have some of the highest access rates, some of the highest element prices, some of the slowest implementation on the entry conditions. Frankly, we've got to do more than we're doing. At the moment we're waiting for the Telecom regulatory processes under the act to play out before we look at testing the that kind of behavior elsewhere, such as in the antitrust courts.

Are the RBOCs doing it any better? After all, these are the ones that have the incentives in the right place. How well can they be expected to perform? I tell you that's going to send us over to the third objective, which is to assure that we don't have long-distance entry before the RBOCs open those exchanges realistically.

This is a subject where the industry has spent a lot of words without necessarily advancing knowledge. So I'm going to try to stick to what we do know about RBOC entry. And it starts here. We know under the new act this is a four hurdle race, and these are the hurdles. First, you have to implement the local entry checklist, fully implement. Second, you've got to be facing some actual facilities competition for both business and residence customers. Then you've got to submit to a DOJ evaluation of conditions. And finally, you have to win the FCC's determinations that your entry to long-distance is in the public interest.

Now, three out of four of these hurdles, B, C and D, remain very speculative. How much competition is going to be required out there? We say nontrivial, everybody agrees. But you can't really look to the act to define it because it didn't.

What DOJ test is going to be used in their evaluation? We hope it's like the MFJ, that it starts with an analysis of whether there is uncontrolled market power locally.

How is the FCC going to weigh the public interest factors? We think that the FCC recognizes how important incentives are and how undermining it would be if premature entries were allowed to reverse the incentives. But at this stage, who knows. All I can do is argue the case and I'm not going to do it right now.

That's why we are spending most of our time working the first issue, the checklist. The checklist is much more granular. We know what it is. We know that it's not just an agreement to do it. It's not just a theoretic availability out there. It needs to be fully implemented. Those are the words of the Telecom Act.

For some of the conditions in that checklist, you get an obvious yes, no. The RBOCs know how to do it and you know when it's been done. It's like dial parity or number portability.

Others are just as important but they're proving a lot more difficult for both sides. And chief among these difficult items are these operating systems for ordering the TSR and the unbundled platform. That has shown up in the industry as a huge problem.

Automated TSR ordering right now is in the early stages. It's only a very few states. Automated unbundled element platform ordering is up and running in no state. Not a single state met the FCC's January 1, 1997 deadline for having the interfaces operational.

We are focusing the PUCs, the FCC, the DOJ on these issues. We're trying to establish metrics and standards where none exist. We've supported the creation of an industry coalition to attempt consensus on a set of quantitative measures that are based on really very common sense business needs. Can we order the stuff automatically? Will the exchange carrier accept the orders in the quantity we submit? Those the customer get service on time? Is the billing accurate? Does the service work? Can you get it fixed? Our view of success here is almost

exactly what FCC chairman Reed Hunt told the state commissioner in November of last year. Provisioning limits must not materially limit the flow of customers from the BOC to its rivals. And folks, the systems do that right now you're going to hear more about it tomorrow from our local service panel. For me, you're going to hear that having said all of what I just said, I still can't answer what you would most want to know about this issue. When do the RBOCs get in? Most of it please recognize is out of AT&T's control. We don't do the checklist compliance, they do. We don't make the public interest determination, FCC does. I can tell you the FCC and the PUC appear to be deadly serious about this. Ameritech Michigan demonstrates that. Ameritech relied on an unsigned AT&T agreement to show that the checklist was available. They didn't get to first base because you must actually be providing service under a signed agreement and neither of those conditions was true. Our position will be steadfast, fully implement that checklist, make big progress on access reform and show genuine competition and choice in your state. What does it mean for 1997 entry? I will say that on the current track no RBOC in our opinion is likely to meet the checklist and show enough competition to qualify for long-distance. They shouldn't get in.

Nonetheless, we've been promised a wave of applications in the second quarter of this year. Nobody ought to build a business on my prediction. So the prudent thing for us all to do is to be prepared just in case some of those applications slip through the net and we get premature entry.

I promise not to talk beyond what I know on RBOC entry. That's it, New subject, access.

This is a large dollar issue for AT&T. Domestically, which is what we'll take first, we're looking at somewhere between a 12 to 13 billion dollar bill. Our historical record on driving down access through public policy is good. I might even say great. There is the twelve year history.

And through a series of regulatory interventions and some smart network optimizing moves, we have moved the cost of access, conversation minutes, both ends, from 18 cents right after divestiture down to five cents on average right now. Even better, you will see that in 1995, the blue AT&T and the red everybody else crossed over, and we now enjoy a slight advantage over our competitors in regard to interexchange access.

But as we assess it, the traditional methods that got us that slope are beginning to run out of gas and still switched access is overpriced by seven or eight times. The local exchange carriers are collecting billions from the interexchange industry. The access charge has disguised the true cost of the service. They deliver a mass of undifferentiated subsidy that's impossible to target and it leaves the local exchange carriers with billions to turn right back on us in their competition in the future. For at least some of those reasons the 1996 act calls for reform. It demanded that any subsidies in these collections be made explicit, that funding be made competitively neutral, and that in our opinion anyway, charges for access be cost based. And that's why we're now in the midst of a very large FCC proceeding on reforming the traditional system. And I'm going to show you how AT&T argues its case in that proceeding.

Let's stay on the left stack, if you would, please.

I'm going to leave out the subscriber line charges. The exchange carriers collect something on the order of 7 billion directly from end users. The stack on the left is what the interexchange industry pays. And as we make it, starting from the bottom, there are to the nearest half billion we'll say there is two and a half billion of special access charges. These are dedicated circuits. Based on our idea of forward looking cost, there is another two and a half billion of actual cost based switched access in the stack. Then we would allow that for legitimate targeted universal service support, there needs to be another five billion dollars

somewhere in the industry. And all the rest, another ten billion dollars or so, is excess. We're going to call that subscriber line overpricing SLOP. So we've got ten billion of SLOP in the system. Our ideal income is the middle column. Our ideal outcome is the middle column. We'll sign up to pay dedicated access on roughly the cost causative basis that's now charged. We will pay on whatever rate structure makes sense the two and a half billion of switched access that we use, actually related to cost. We'll pay our part of the yellow, the universal service subsidy, although we think that under the act, the tax base here needs to be expanded. And that when we get some additional payors in the next—the yellow should go down at least somewhat as a burden on the interexchange industry. And the SLOP just ought to go away. It's excess, It doesn't relate to cost based pricing and its not needed for universal service support. It's just needed to cover inefficiency or what have you. And in consequence, we will flow it through in our long-distance charges, but in the end, the interexchange industry will be relieved of more than \$10 billion worth of the burden that we now pay in our access charges.

Okay. That's what we argue. Realistically, as we come near the end of this proceeding, we have to acknowledge that it may not happen. A lot of people think that is too radical a move. Other people think it puts too much pressure on local rates. Not to worry. We are working a strategy that allows us to win under other combinations of reform which are out there in the right-hand column as a for instance.

First and foremost in that strategy is to make the access charges portable. Whoever wins the customer collection the access. That was the basis for the UNE P demonstration we went through. If you're a facility based carrier or a platform competitor, you don't pay act sells to the LEC. You collect it. Same for the subscriber line charge. You collect it, not the LEC, from the end user. And if you're serving one of the supported subsidized customers, you

collect the subsidy, too. Your share of the yellow. That is in fact what the FCC is now denominating incorrectly the market forces approach, but it is in their sights and frankly we have won the portability once in the local interconnect order. We feel good about that part of the strategy.

Second piece of the strategy, if you don't take ten billion of SLOP out, at least take a large portion out. Everybody agrees we're not paying cost based access charges. A minute of access is the same as a minute of local service and we know from those arbitrations that that minute costs less than half a cent, not the two and a half or three or four or five that we're being charged in access. How would you get some of that SLOP out there? I suppose you could raise the subscriber line charge or you could just have the RBOC suck it up and take it and look for more efficiencies. We might even see the FCC putting what's left of the SLOP on a per line charge to the interexchange carriers. But our position maintains—or continues to insist on a very large buoyant ante to the SLOP reduction.

Finally the third part of the strategy is surcharge for the subsidy for the yellow segment, whatever it is. We acknowledge here it might even go up. We're adding schools and libraries and rural health care facilities to the mix of supported customers under the new act. But even though it goes up or might go up, we could use some more payors like the RBOCs who collect the slick and have interstate corridor traffic and most importantly make it explicit and make it competitively neutral. That's what a surcharge on all the carrier's revenues would do. We won't then end up with a relative disadvantage at AT&T.

When that's all said and done, and whatever combination of elements you get in the right-hand stack, here is what we think it's going to mean. To the industry, we think that all the put and takes are going to leave us with something less than the 20 billion dollars of burden we now carry around. For AT&T, on day one, we expect to be recovering any subsidy as an excise tax like charge on the bottom of the bill. We expect to be recovering any per line assessments against us right back as a per line assessment on customers. And we expect that due to some structural shifts and some outright SLOP reduction, our per minute access rate therefore will decline, and even as the market pushes that through to lower long-distance prices, we'll be benefiting from a handsome piece of stimulation on calling.

That's day one. On day two, I hope by now our strategy is clear. Starting on day two, we play the unbundled element platform game. We win our share of whatever stack is left as we win the customer on our platform or on our own facilities.

We'll know a lot more there in a couple months.

Let's now go to global. Double back on those principal policy objectives. Declare number one not an issue outside the country.

Alas, we don't have enough of a presence to bring down any regulation on us beyond our boarders. Let's recognize we've been working outside the United States and inside for that matter on numbers 2, 3 and 4 in the same way as we have been working for domestic markets. What result? Mixed. As to opening none US markets, the track record is not great. As to preventing PTT entry here until the whole market is open, no better than spotty. As to lowering access costs which are settlements in international parlance, better. A lot better. We do very well here. But it's drudgery. It is working through bilateral negotiations one at a time.

What we are looking at this will season in this international policy work is a break through in all three objectives, which is the cause of a double play with the GATS trade agreement on the one side and the proposed FCC benchmark order on international settlement rates playing on the other side.

Let's take a quick look at the first part of that play. What GATS did for us is acquire commitments kicking in no later than the year 2,000 to open markets covering 90 percent of the world's telecom revenues outside the United States. This shows you the whole world after GATS. The 35 percent U.S. we've always counted as open. Then there is another 45 percent of the world that just got committed to what we call full offers. That means that the countries commit to enforceable entry conditions. They eliminate ownership and control restrictions on second and third carriers, and they allow international facilities competition. Then there are 14 percent of the world's revenues, 44 countries, that gave us partial offers, meaning that one of those three elements of competition I just named is missing or partially missing. Here you get countries like Mexico and Canada because they insist that ownership cannot rise above 49 percent. And then the last six percent of the world's revenues are those 60 odd small world trade organization countries, as well as China and Russia who are not members of WTO.

What this represents to AT&T is a lot of opportunity. I would emphasize it as opportunity beyond having to set up intracountry telecom businesses with all the expense and investment that goes there. We have new opportunities here, such as the ability to terminate our outbound calling through competitive modes that are going to spring up in these newly opened countries and thus avoid we hope some of those high settlement rates. We also have an opportunity to do truly world telecom networking. Maybe hubbing through the United States. Moving traffic from country A to country F through the U.S., becoming to telecom what Atlanta is to air travel in the southeast.

The thing that let's us support GATS with this kind of fervor is that companion piece I mentioned, this pro-

posed benchmark order for international settlement rates coming down from the FCC. That aims to move these high rates down, and it provides a protection for AT&T as well as opportunity. The reason we need protection is it's going to take some time for these GATS opening to take hold and show up in competitive market openings and gateways into countries. Meanwhile we're going to go on without some regulatory intervention, paying these very high settlement rates on our outbound traffic into those countries. Think of it as terminating access. Sure we make some back at the same level on the return traffic, but we are vulnerable to losing that kind of return profit if a PT and T comes over here and sets a up sub or strikes a sweet heart deal and diverts its inbound traffic to its favorite carrier.

The benchmark order, if properly implemented, would by and large give us some of insulation from that. Here is what's happening as the FCC is tentatively proposing it. The FCC divides the world into these three categories of countries. High income, middle income, low income. It says to the world, you are outrageously high above cost existing rates there in the red bars, pink bars for each of the countries. Need to come down to a benchmark zone which has six to nine percent—six to nine cents per minute at the bottom. I've averaged it here as seven and a half. And a different top end of the zone, depending on whether you're high, middle and low. What's more, we'll let you implement on different schedules. We'll give you one year for the high income countries, two for the middle and four for the low income countries.

And what that's going to do again is reduce the terminating access we pay to the foreign countries. It will also reduce the access we collect on the incoming traffic. But because we have so much more traffic out than in, that increased profitability outbound can more than offset the reduced collections on the inbound. And we aren't

threatened anymore by the incoming traffic diversion. At cost in fact we're absolutely indifferent.

Now, besides protection of the existing revenue streams, there is a lot of room to make money in this games, because of our net outbound traffic advantage. And we're going to try to show it to you this way. Up there on the top, the horizontal bar is what we're paying in 1996 net for international settlements for our top 65 countries which cover about 80 percent of our international revenue stream. About two and a half billion dollars.

Now, if you go to the middle downsloping line, if over a five-year period we pay outbound at the high end of the FCC benchmark and collect that same rate coming back in, we save a billion six hundred million on what we currently pay net to terminate our traffic overseas. If we go to the low end of the FCC benchmark range, we pay seven and a half out and collect seven and a half back, we're going to have 2 billion. And something we don't like to think about, but if it's asymmetric and we pay the high out and the low in, then you're on the pink line and we've still got more than a billion dollars of savings. Indeed if we have to pass the better part of that through to end user rates, we still think there is massive stimulation left in these long-distance rates overseas which have been too high because of these inflated settlement costs.

I guess the point is that we have a lot of room below that yellow line to accommodate even an uneven implementation of the benchmark order and some GATS delays before this would ever float above that line. There is clearly much more opportunity here for AT&T than there is risk.

In fact, I got to say, in this scenario, the place to be is in AT&T's shoes. We're already competitive in the United States. We know how to compete. We're going to have new opportunity in other people's monopoly markets. We've got more outbound traffic than in. We've got access coming down. The place not to be is one of them. The monopoly PTT. Your market is about to be attacked for the first time and the mother's milk of excessive settlements is about to be taken from you.

So I can't wait for this game to begin.

Look, opportunity after opportunity. I'm going to stop with that. I want to wind up by saying we are winning these opportunities now because our public policy positions are lined up with customers. Giving customers more choice and more value.

After a lot of thought and more importantly after years of losing public policy fights on the other side of the equation, I can tell you that in a prepluralistic society, it's the customer friendly position that wins the contest in the public policy arena. And with that as our touch stone, ladies and gentlemen, and with our businesses lined up behind it, we're winning not just opportunity out there, but we're winning positions that let us be ultimate winners no matter how some of the uncertainty breaks around the fringes of these proceedings. We are creating frameworks for opening huge new markets here and there. I'll tell you for years we're going to be enforcing those rules as we break down the existing monopolies. But I'll also tell you that for the first time I think we see the day when regulatory obstacles are not limiting AT&T's opportunities.

Soon we're not even going to need fundamental change out there in public policy. We're just going to need the enforcement of the frameworks that we're setting up right now. So in this public policy world, in this mystical world of regulatory work, I can assure you that AT&T has gone on the offense. We're there now and forever more. So think you very much and we'll start with your questions if you have any.

A SPEAKER: John, let's take the worst case out of the 8th Circuit and ultimately the Supreme Court, let's say rebundling does not live. How much investment would AT&T have to make in switches or other elements to still be able to get those kinds of financial results? And how long would it take you to get the pieces out in the field to be able to get those kinds of results?

JOHN ZEGLIS: I'm going to give the nonanswer. I cannot think of bundling falling in the 8th Circuit in the Supreme Court when it's already commanded as a matter of the Telecom Act of '96. Pricing, sure that's an issue, but not unbundling itself. But rebundling? Rebundling, once we provide the service on a platform we are not going to pay the access because that's a matter of the FCC's interstate access jurisdiction. What we are seeing in rebundling challenges is the state saying, Georgia is a good example, if you rebundle the platform you have to pay TSR rate, not the unbundled elements rate. So if you have got the elements but had to pay the TSR rate and didn't have to pay anything extra for the additional elements, then the increment is just between the TSR all end price for local, and whatever the unbundled elements price might have been. If you have to pay additional element prices on top of your TSR, we haven't run the numbers on that, and I'm going to defer any elaboration on that question to Harry Bennett, who can also give you tomorrow some scope of what the investment might look like, but it is not in our plans.

A SPEAKER: My understanding is in places like Louisiana you basically would only have to throw in operator services or one item in order to get the unbundled rate, and that's a used profitability issue. My question is, what does it take for to you do that everywhere?

JOHN ZEGLIS: I don't know. But I will seize on your remark, this is what we call N against N minus 1, even places that we can't use the entire recombined platform in those very few jurisdictions, if we add one element, all

their elements minus 1, then I believe we still get platform prices and not into TSR mode. Yes?

A SPEAKER: My understanding is that many of the states' orders are actually interim orders, I'm wondering to what degree there is risk when the final orders are issued, it's not as good as it looks right now and also if you could articulate how many are—

JOHN ZEGLIS: I'm going to go to extended panel to give you exact numbers. I'll tell you that my opinion, having watched this, is we stand to gain probably as much on finishing off the unfinal orders as we stand to lose as in the case of Utah, which said that was a temporary rate, that was in the case of California, which they said they would come back to the rates for GTE in a 1997 proceeding. And as in the case of any nonrecurring noncost base charges, which we want a second bite at the apple for. As to how many of the solid blue, gentlemen, the '82 access lines covered are still subject to some further dealings in the state commissions we are going to give you our Chief of Staff to the local service division, 'our major dome in government affairs in the state.

A SPEAKER: We have 27 decisions today of which I think four to six are final, eleven are interim. Our expectation is, our prior history is the results in final tend to be a little bit better than even the results in interim. We are very very confident. Using John's paradigm of access lines, I think it breaks out in the 80s for final and the low teens, if at all, in the teens, on the interim, so we feel pretty good about where we stand today.

Just to follow up, if I might, John, on the question over here about minus 1, we had a lot of success with the 1 being operator services and DA in our arbitrations and our expectations are that if it does turn out to be N minus 1, we feel good about the opportunities, given our OS platforms.

A SPEAKER: Rick, Goldman Sachs. You said you didn't want to speculate on RBOC long distance entry, but

I'm going to ask you anyway. Could you, in light of the fact that the famous 13 words that you tried to get put into the bill did not get there, and you used the phrase the sequential and other carriers used sequential, the Bells of course call it simultaneous and I guess I'm just trying to ask, you know, your sense on the timing and where you see the sticky points going forward, particularly for BC and B, which you said were less specific.

JOHN ZEGLIS: Well, I stand on a lock on sequential, you can't have simultaneous if the requirement is to have the checklist fully implemented, an agreement under which the competing carrier is providing service and actual facilities competition running out there in both the business and residence markets. I know there is an issue here of rhetoric about simultaneous and sequential, but I think we have got that one knocked in the act.

Now as to the missing 13 words, what we are referring to here was a description of how much facility build-out there had to be, and it was like comparable to the exchange carriers' own operations in the state. That was not in the final version. It was taken out because of a misguided fear in our opinion that that meant a state-wide over-build, one for one as into every home and business in the nation. And we were assured at the time that nobody with a full deck would think that that means one loop or one switch, obviously we are looking for nontrivial, local facilities competition significant enough that it puts checks on unrestrained monopoly pricing that the carriers might otherwise use. That's why I say it's very hard at this moment to get into how much more than nontrivial is required and less than a full state-wide build-out.

A SPEAKER: If it is trivial because I'm guessing-

JOHN ZEGLIS: Nontrivial.

A SPEAKER: If it is a trivial degree of competition, a year or two years from now, is it the FCC or the DOJ or the state that you see standing in the way?

JOHN ZEGLIS: I think they're all standing in the way of the RBOCs.

A SPEAKER: Right.

JOHN ZEGLIS: They all get a bite of the apple. The state starts by affirming the checklist is implemented, that all of these checklist conditions are being provided pursuant to a signed agreement to a competing carrier. Probably they do a lot less on the extent of competition than the other two. DOJ, I think they are going to look at it. That's been their bent now for 15, 20 years. So you will get a look-see by the Justice Department, but they don't make the decision. They render an opinion which has to be given substantial weight at the FCC. Your question in some respects is easier than my answer. The FCC makes the final determination on that one with the state and DOJ. Who has got a mike?

A SPEAKER: A few weeks ago Bob Allen said access charges savings would be passed through to customers; is this a policy that you are actually promoting publicly in regulatory form? And the second question is, John Walter spoke about best in class cost position. And what you showed us was about cost reductions but didn't talk about how other competitors might be positioned differently. For example, what will the BT/MCI merger impact on cost relative to perhaps eliminate settlement and hubbing between those two companies?

JOHN ZEGLIS: The access flow through commitment is probably not our policy, it's a regulatory policy. That is to say we are at a point now where in order to get fundamental change and relief from that burden we are going to have to give the flow-through as the quid pro quo to get it. How much of an additional commitment that is over market which has required us to flow access and more through every year for the last 12 years, I don't know, but you get the drift there of my opinion.

As to cost advantages, on the access I think was your question. BT/MCI was your choice, we also worry about

things like NYNEX, Bell Atalntic, and the cost advantage we worry about is not our access against long distance companies access, it's the two-ended access advantage or even a one-ended access advantage that a carrier gets when it both supplies its own access and charges it, so the left pocket-right pocket transfer to us is a chance to squeeze by bidding up access and bidding down retail.

The answers are we are very concerned about that when you are dealing with local exchange carriers here, especially when you are in their regions. Traffic for both ends of the call, like NYNEX and Bell Atalntic, would expand a lot of territory to become subject to that. You have exactly the same thing going on with BT/MCI, although it's one ended it's in Britain, so yes, we are worried, yes, we are in the FCC, it's a condition to closing merger. They need to bring the settlement rate down from the existing 11 cents to the bottom of the FCC rate, 6 cents, which we think is close to the cost of access in Britain.

A SPEAKER: Basically between those two, can't BT/MCI say we are going to do a paper transfer of money in essence making it zero, which says you are not best in class, especially if they begin hubbing?

JOHN ZEGLIS: On this we won't have access until MCI metro substitutes all the lines, they have the same problem we do. On the other side they have the advantage of having it in their own enterprise. Unless we request, get access to the access, at cost, which is what we think 5 cents might yield. Yes, we worry that they will have that advantage and they can use it to price squeeze. So to get the answer down so they don't have room to price squeeze us since it's cost to both of us.

A SPEAKER: Todd Jacobs. You made the compelling case about the application of the FCC benchmarks reducing your settlement costs over the next five years. I assume that was using static minutes?

JOHN ZEGLIS: The same minutes that produced the 2 and a half billion.

A SPEAKER: My question is, isn't the risk to international information the risk—for the next—first time as opposed to the last ten years or 15 years, that prices could fall just as fast, if not faster, than settlement rates, given new networks springing up internationally, new placings to land traffic, you said the probability of sweetheart deals with local subsidiary networks in the U.S., et cetera, what's the risk that if the international calls have too much profit per minute built in that could be coming down over the next five years?

JOHN ZEGLIS: I think two risks. The one I spoke to was that our profit on a current international call that we earn from a U.S. subscriber outbound comes in two bites, one is what we collect minus what we pay, netted against what we collect from the incoming when the call comes to us as part of our proportionate return from that PT and T. What we are working on through the settlement case here is to make us indifferent to whether we get whip-sawed or traffic diverted disproportionate return. That at least puts us in control of our own destiny, we win the outbound call, we win the profit and we don't save all to somebody else's idea of return traffic diversion. I think, I think the benchmark settlement order and the FCC's rules against whip-sawing until it is in place.

The second part of your question I think is market, when we do get these down and in control of our destiny, what about margin of outbound calls, aren't we all going to have a go at lower prices to earn more customers? And for that we look forward to Gail McGovern and Jeff Weitzen's answers this afternoon on their panels.

A SPEAKER: Yes, a question. What is your view of three-way mergers of RBOCs? And secondly, your chart shows like 4 billion of access reduction on the right-hand side, which I guess was your compromise solution. Is that instantaneous or over time? How do you look at that? What do you think is the really most likely on access charge reform?

JOHN ZEGLIS: All right. My view on three-way mergers of RBOCs first is if they eliminate competition, potential competition in local Bells like NYNEX and Bell Atlantic threatens to, that three-way is worse than two-way. In addition, it will give more opportunity to price squeeze us on both ends of a call because three-way mergers will have more intracompany calling than twoway mergers have, so if it's bad in two-way for the reasons we have suggested at NYNEX, Bell Atlantic, it's worse in three-way. Now, on the access reduction, the right-hand chart was over there, so that you wouldn't draw a line back and get any estimate on what we expect to have. That was just to show lower than what we pay now and higher than Nirvana. As to any predictions on how this might come out, I'm going to let Jerry, our senior officer, shepherding the FCC in our Washington operation, add any refinements he wishes to or give a no comment. Your choice, Jerry.

A SPEAKER: I would like no comments, but let me try for a minute. We really think there are three ways we can win with access charges; one, you get immediate reduction and the SLOP is taken out of the system, which is right public policy. Again in line with what the consumers deserve.

Second, a significant initial reduction. We have identified on record to the FCC a number of ways in which using the current proceeding, the current record, before the commission, that they could reduce over 4 billion in access charges immediately. Those include just taking retail end user charges off the general support facility charges which are all embedded inappropriately in access charges by redefining the cost of capital, which is part of the price gap proceeding, so we do believe there is ample opportunity for the commission to right now reduce access charges significantly tied to that, also as you move costs explicitly to the end user, as you would with univer-

sal service charges, as you would with some of the per line charges and some of the other end user charges that could be put on the bill, you are reducing per minute access rate significantly. Again that is beneficial to the company.

And the third way we win that, John I think explained very well, was the unbundled elements platform. don't pay access when we use the unbundled elements platform, if the FCC is consistent with what they said thus far. We are in a good position in access charges both on the FCC order on the 251 order did spell out what John said they are on the record before the Court, before the FCC is already making those determinations; and second on the pricing methodology they already looked for the pricing to be forward looking incremental cost and that's what the legislation calls for, is that we pay only the costs and don't add subsidies. So we believe we are in the best position initially to win and ultimately to survive any challenges. Again the states have been supportive, in the joint board they said you should have forward looking cost. We think we are in a good position on those.

JOHN ZEGLIS: Jerry, do you think there is a snowball's chance that the RBOCs would allow a three-way merger?

A SPEAKER: I think a three-way merger is going to raise more than arithmetic possibilities of obstacles being put in front.

JOHN ZEGLIS: Last question.

A SPEAKER: Jack from Solomon. First of all, John, if you could settle with our friends at Ameritech so we could get the transcript from the conference with our friends in December.

JOHN ZEGLIS: We will be accepting service of process at lunch for any agreed analyst.

A SPEAKER: Exactly. On the access, something Jerry said or this per line trigger, a corollary thought from the discussion of maybe putting the onus of access charges, whomever collects it, on the originating as opposed to terminating end, which the theory being, I guess, you know, competitors can control the originating end much more so. First of all, do you think that will occur?

Second of all, in your bar charts there did that include that phenomenon, and if it didn't, I would guess that for you and the other IXCs in so much as the onus has shifted toward the originating versus terminating ends, that would add above and beyond whatever you would think you would chop out of that excess?

JOHN ZEGLIS: Jack, that's hard to respond to. The bar charts were illustrative of mega movement and didn't account for shift of access from one end to the other. Our view of terminating access for the moment is when we are on the platform we are going to get as much as we receive. Whatever it is it completely washes in terms of payment out and collection in. It's almost like bill and keep. As to what do you want to know, the cost shift in the FCC moves it back on to the originating? I don't think it's going to change much of what I said. I think it's just a shift in whether we pay it on one end or the other we have to work it off by the platform.

A SPEAKER: I guess in theory you are going to go after certain customers, so in theory you will have more of a platform on the originating end, then say the random number generator on the terminating end.

JOHN ZEGLIS: It certainly makes the blue stacks I had next to the uni customer higher and more attractive if we move it on the front end and eliminate it. Jerry, do you want to respond?

A SPEAKER: Reed Hunt and the other members of the commission have recognized the fact if you are going to

use a market base approach, it depends on the market, there is greater competition on the originating end than the terminating end. In a speech last Tuesday, Reed Hunt reiterated you would expect you would reduce access charges more on the originating end than the terminating end at the outset because that would be more responsive to what you need to do.

The other thing is it does actually help those stacks as we get into the market while we are signing people onto the MB one platform, it does help us to have terminating end access charges reduced to a certain degree.

A SPEAKER: I think you meant reduced on the terminating end.

JOHN ZEGLIS: I have to get off here. Last word to my colleagues and secondarily to the analysts, our president wants me to remind my colleagues, the 2.6 billion cost reduction does not include any advantage that we deliver up here on this settlement on the access so for you all redouble your efforts and for the analysts, you can make that additive. Thank you very much.

CONNIE WEAVER: Thank you, John. Next we are going to take a little bit of a break and go to lunch. Let me give you a couple of logistical details. We have a message center set up outside in the mid hallway as you are walking down the foyer toward the main registration area. So please check there if you have any inbound faxes or messages, they will be posted there.

We also have copies of this morning's speeches. Bob Allen's speech and also John Walter's speech, if you would like to have a copy, at that same information desk. They will be there available for you. We will have an informal lunch today, we will make it fairly quick, no remarks at lunch, it's an opportunity for you to meet and get to know some of our senior team that's here today, they will be sitting amongst you. That will be over where you regis-

tered where you came in in the main lobby, some tables set up in the lobby, but also in Cuisine and the Watson's restaurants there will be people to tell you where that is. I would like to reconvene at about 12:45 today, in about an hour and 15 minutes. Enjoy lunch.

Thank you.

UNITED STATES COURT OF APPEALS FOR THE EIGHTH CIRCUIT

No. 96-3321/3406/3410/3414/3416/3418/3424/ 3430/3436/3444/3450/3460/3507/3519/3520/ 3603/3608/3696/3708/3709/3756/3901/3906/3982

IOWA UTILITIES BOARD,

Petitioner,

BELL ATLANTIC CORPORATION, et al.,
Intervenors on Appeal,

V.

FEDERAL COMMUNICATIONS COMMISSION; UNITED STATES OF AMERICA, Respondents.

> Submitted: January 15, 1998 Filed: January 22, 1998

ORDER ON MOTIONS FOR ENFORCEMENT OF THE MANDATE

Before BOWMAN, WOLLMAN, and HANSEN, Circuit Judges.

HANSEN, Circuit Judge.

I.

Several petitioners have filed motions requesting this court to issue and enforce our mandate in the case of *Iowa Utils. Bd. v. FCC*, 120 F.3d 753 (8th Cir. 1997). On October 14, 1997, after granting motions for panel rehearing, we amended our July 18, 1997, decision and issued the mandate. *See id.* at 813 (replacing Section II(G)(1)(f)); *id.* at 818 n.38 (clarifying scope of vacatur); *id.* at 819 n.39 (clarifying scope of vacatur). We expressly reserved jurisdiction over the petitioners' motions to enforce the mandate. Today, following oral argument on the motions, we address that issue.

One of the core holdings of our July 18, 1997, decision was that the Federal Communications Commission (FCC) has no jurisdiction to issue pricing regulations for interconnection, unbundled access, resale, and transport and termination of local telecommunication services under section 252(d) of the Telecommunications Act of 1996.² We held that the Act vests exclusive authority to establish the pricing requirements of this section in the state

¹ Petitions for writs of certiorari have been filed and are currently pending before the Supreme Court. See AT&T Corp. v. Iowa Utils. Bd., 66 U.S.L.W. 3387 (U.S. Nov. 17, 1997) (No. 97-826); MCI Telecomm. Corp. v. Iowa Utils. Bd., 66 U.S.L.W. 3387 (U.S. Nov. 18, 1997) (No. 97-829); Association for Local Telecomms. Servs. v. Iowa Utils. Bd., 66 U.S.L.W. 3387 (U.S. Nov. 18, 1997) (No. 97-830); FCC v. Iowa Utils. Bd., 66 U.S.L.W. 3387 (U.S. Nov. 19, 1997) (No. 97-831); Ameritech Corp. v. FCC, 66 U.S.L.W. 3459 (U.S. Dec. 24, 1997) (No. 97-1075); GTE Midwest Inc. v. FCC, 66 U.S.L.W. 3459 (U.S. Dec. 30, 1997) (No. 97-1087); US West Inc. v. FCC, 66 U.S.L.W. 3459 (U.S. Jan. 5, 1998) (No. 97-1099); Southern New England Tel. v. FCC, — U.S.L.W. — (U.S. Jan. 8, 1998) (97-1141).

² The Telecommunications Act of 1996 (the Act) is codified in Volume 47 of the United States Code. We refer to it throughout by reference to the applicable section number. "Section 252(d)," for example, denotes 47 U.S.C. § 252(d).

commissions, and we vacated the FCC's pricing regulations in which the FCC purported to arrogate that power to itself. Today we hold that the FCC violated this central tenant of our decision when it issued its Ameritech Michigan Order of August 19, 1997.3 Because that portion of the Ameritech Order which offends our decision is, in our view, an advisory opinion of the FCC, we need not review the FCC's denial of Ameritech's application or even determine whether we have jurisdiction to do so. Rather, Petitioners request and we grant prospective relief in the form of a writ of mandamus. Specifically, we direct the clerk of this court to issue a writ of mandamus ordering the FCC to abide by our mandate and to refrain from subsequent attempts to apply either directly or indirectly its vacated pricing policies regarding the pricing of interconnection, unbundled access, resale, and transport and termination of local telecommunications traffic. For reasons which we explain, it has no authority to do so under section 271(d)(3)(A) or section 271(d)(3)(C) of the Act.

II.

A. The Mandate

In our July 18 decision, we held in the clearest possible terms that the state commissions have exclusive jurisdiction to regulate the prices that incumbent local exchange carriers (LECs) may charge their competitors for access to the incumbent LECs' local telephone network facilities. After a detailed analysis of sections 251 and 252 of the Act, we concluded that "the Act plainly grants the state commissions, not the FCC, the authority to determine the rates involved in the implementation of the local competi-

^{*} See In re Application of Ameritech Michigan Pursuant to Section 271 of the Communications Act of 1934, as amended, to Provide In-Region, InterLATA Services in Michigan, FCC 97-298, 1997 WL 522784 (Aug. 19, 1997) (memorandum opinion and order denying application of Ameritech Michigan pursuant to section 271, as amended, to provide in-region, interLATA services in Michigan) (petitions for recon. pending) [hereinafter Ameritech Order].

tion provisions of the Act." Iowa Utils. Bd., 120 F.3d at 796. Elsewhere we wrote that

the terms of the Act clearly indicate that Congress did not intend for the FCC to issue any pricing rules, let alone preempt state pricing rules regarding the local competition provisions of the Act. Because the Act clearly grants the states the authority to set the rates for interconnection, unbundled access, resale, and transport and termination of traffic, the FCC has no valid pricing authority over these areas of new localized competition for the states to negate. . . . [S]ubsections 252(c)(2) and 252(d) clearly assign jurisdiction over the rates for the local competition provisions of the Act to the state commissions[.]

Id. at 798-799 (internal citations omitted). In short, our decision made very clear that "Congress did not envision the FCC's participation in determining the prices that the incumbent LECs will be able to charge for opening their networks to new entrants." Id. at 795. We held that in promulgating regulations purporting to govern the types of pricing systems state commissions were to adopt, the FCC had exceeded its statutory authority and violated the plain meaning of the 1996 Federal Communications Act. Accordingly, we vacated the national pricing rules that the FCC had promulgated.

B. The FCC's Ameritech Order

We filed our *Iowa Utils*. Bd. decision on July 18, 1997. On August 19—scarcely one month later—the FCC made clear its intention to disregard those portions of our decision with which it disagreed. It did so in the memorandum opinion and order which it issued denying Ameritech Michigan's application to provide in-region interLATA services in Michigan. In that opinion, the FCC reasserted its authority to do precisely what we held in *Iowa Utils*. Bd. it had no power to do. It asserted that it had the authority to interpret section 252(d) of the Act, and it

adopted a policy which will coerce state commissions to adopt its vacated TELRIC-based pricing rules for implementation of the local competition provisions of the Act in spite of our order.

The Ameritech Order denied Ameritech's application for authorization under section 271 of the Communications Act of 1934, as amended, to provide in-region, inter-LATA services in the State of Michigan. It denied the application because it found that Ameritech had failed to satisfy section 271's competitive checklist's requirements of access to its operations support systems, interconnection, and access to its 911 and E911 services. Finding these three failures to be dispositive, the FCC determined that it need not and would not address whether Ameritech had satisfied the other requirements of the competitive checklist. See Ameritech Order ¶ 5-6, 280-81. Specifically, it "[did] not reach the question of whether Ameritech's pricing of checklist items complies with the requirements of section 271[.]" Id. ¶ 281. Thus, paragraphs 280-297, wherein the FCC reasserts its authority to establish the prices for the local competition provisions, do not address the merits of Ameritech's application, but instead constitute an advisory opinion. The FCC explained its issuance of such an opinion by stating that it sought to provide guidance as to what showing would be required in future applications to demonstrate full compliance with the checklist. Id. ¶¶ 6, 281.

It is not for us to address the propriety of the FCC's issuance of an important policy statement in an advisory opinion separate from the merits determination of a section 271 order. Rather, our inquiry is limited to the question of whether the issuance of this particular advisory opinion and its content constitute a violation of our mandate. It clearly does. The FCC admits in paragraph 283 that "the Eighth Circuit has held that the Commission lacks jurisdiction to issue national rules establishing a methodology by which the states determine the rate for interconnection, unbundled network elements, resale, and

transport and termination in state-arbitrated interconnection agreements pursuant to section 252." Inexplicably, it then proceeds to establish just such a methodology, stating that the cost-based standard of § 252(d) is contained in a federal statute and is "therefore[] presumed to have a uniform meaning nationwide." Id. ¶ 286. This attempt to reassert the vacated pricing rules by imposing them as conditions for entry by the Bell Operating Companies into the in-region, interLATA telecommunications business does by indirection what we told the FCC in lowa Utils. Bd. it could not do. The FCC cannot do in an advisory opinion in a ruling on a section 271 application that which we have expressly forbidden it from doing in its rule-making procedure. A more clear violation of our mandate could hardly be imagined.

C. Section 252

Section 271(d)(3) requires the FCC to determine whether an applicant has implemented the competitive checklist of Section 271(c)(2)(B). Items (i), (ii), (xiii), and (xiv) of that checklist in turn require a Bell Operating Company (BOC) to provide interconnection, access to unbundled network elements, transport and termination, and resale prices that are "in accordance with" subsections (c) and (d) of section 252. In other words,

 $^{^4}$ 47 U.S.C. \S 271(c)(2)(B), the Competitive Checklist, provides in relevant part:

Access or interconnection provided or generally offered by a Bell operating company to other telecommunications carriers meets the requirements of this subparagraph if such access and interconnection includes each of the following:

⁽i) Interconnection in accordance with the requirements of sections 251(c)(2) and 252(d)(1) of this title.

⁽ii) Nondiscriminatory access to network elements in accordance with the requirements of section 251(c)(3) and 252(d)(1) of this title.

items (i), (ii), (xiii), and (xiv) of the competitive checklist do nothing more than incorporate by reference the specific requirements of sections 251 and 252. As discussed above, our July 18 decision clearly held that only the state commissions have the statutory authority to set prices under sections 251(c) and 252(d).

The FCC does not contest the fact that section 271 (c)(2)(B) merely requires compliance with sections 251(c) and 252(d) of the Act, and it concedes that it "lack[s] authority to prescribe a national pricing methodology to implement the requirements of section 252(d)." See id. ¶ 284. Nonetheless, it engages in a lengthy discussion of its interpretation of section 252(d), see id. ¶ 282-294, and ends this discussion by concluding that subsections (i), (ii), and (xiii) of section 271(c)(2)(B) all require that the rates charged by the applicant BOC must be based on TELRIC principles. Id. ¶ 292-93. It clearly announces that it will not grant a section 271 application unless the rates are based on TELRIC principles. Id. In so doing, the FCC reinstates the substance of the pricing rules we vacated in our prior decision. In other words, in order to receive future FCC approval, a BOC will have to show that it prices its interconnection, unbundled access, resale, and transport and termination offerings under prices determined by the FCC's methodology. This violates our mandate. As discussed above, the very core of our holding was that the state commissions—not the FCC—have the exclusive authority to determine the pricing requirements of section 252(d).

^{4 [}Continued]

⁽xiii) Reciprocal compensation arrangements in accordance with the requirements of section 252(d)(2) of this title.

⁽xiv) Telecommunications services are available for resale in accordance with the requirements of sections 251(c)(4) and 252(d)(3) of this title.

The FCC cites subsections (i), (ii), and (xiii) in support of its assertion of pricing authority. See Ameritech Order ¶¶ 292-93. We additionally discuss subsection (xiv) to clarify that nothing on the checklist could possibly be interpreted to grant such authority.

The FCC's justification for its reassertion of local pricing authority lacks even the scent of merit. It argues, in effect, that practical necessity requires it to violate the clear direction of this court. It writes:

Because the Eighth Circuit concluded that the Commission lacked authority to prescribe a national pricing methodology to implement the requirements of section 252(d), if that decision stands, the meaning of section 252(d) ultimately will be determined through de novo review of state determinations by the federal district courts. The Act provides that parties aggrieved by state determinations under section 252 may sue in federal district court. Consequently, the district courts will review numerous interconnection agreements from some, if not all, of the states and the District of Columbia. The Courts of Appeals and, perhaps ultimately, the Supreme Court, will resolve the issue of what the statutory requirement that rates be cost-based means. litigation will take years, however, and inevitably will run the risk of impeding or significantly delaying the development of competition in the local exchange market, and, consequently, delaying the deregulation of the telecommunications markets that Congress envisioned.

While the question of what constitutes cost-based pricing under section 252(d) wends it [sic] way through the courts, the Commission, pursuant to section 271, must determine whether the BOCs have fully implemented the competitive checklist, which incorporates the section 252(d) cost-based standard. The BOCs will file section 271 applications in the meantime, and the Commission is obligated by section 271 to issue a written determination approving or denying the authorization requested not later than 90 days after receiving an application.

Ameritech Order ¶¶ 284-85. The FCC uses this policy of expediency argument to justify its decision to flout this court's decision. However, the policy argument is both flawed and beside the point.

The FCC's policy argument is flawed because, counter to the assertion in paragraph 285 of the Ameritech Order, the FCC need not wait for the courts to review the state pricing regimes before it can apply them. Rather, the decisions of the state commissions are binding the moment they are issued. It is true that the pricing schemes established by the state commissions are appealable to the federal district courts by aggrieved parties, as Congress has directed. However, pending any such appeals, the pricing determinations of the state commissions constitute binding law. Thus, the parade of horribles descibed by the FCC will never arise. The FCC's role is, in fact, quite simple: It must ascertain whether each individual applicant BOC has complied with the individual state commission's pricing scheme applicable to it and in effect at the time of the application. This can be done in part by simply asking the state commission whether the applicant BOC has complied with the state commission's pricing rules, as contemplated by section 271(d)(2)(B).6 There will therefore be no occasion for the FCC to invent a requirement that pricing be done according to TELRIC principles. In fact, the FCC is expressly barred fom limiting or extending the checklist "by rule or otherwise." See 47 U.S.C. § 271(d)(4).

The arguments advanced by the FCC are also beside the point. Notwithstanding its merits, a policy argument bottomed on an agency's view of expediency can never justify the agency's disregard of the existing mandate of

⁵ The FCC is required to consult with the state commissions to verify the compliance of the BOCs with the checklist. See 47 U.S.C. § 271(d)(2)(B). We are not convinced by the FCC's argument that Congress intended section 271(d)(2)(B) to have no effect.

a federal court in a case in which the agency was a party litigant. "It is emphatically the province and duty of the judicial department to say what the law is." Marbury v. Madison, 5 U.S. (1 Cranch) 137, 177 (1803). After a court has spoken, the FCC is bound to follow that court's mandate, because the FCC "is not a court nor is it equal to [a] court in matters of statutory interpretation." Yellow Taxi Cab Co. of Minneapolis v. NLRB, 721 F.2d 366, 382 (D.C. Cir. 1983). The FCC's disagreement with this court's decision is "simply an academic exercise that possesses no authoritative effect[,]" and in predicating its reassertion of pricing authority on its disagreement with this court's interpretation of section 252, the FCC "operate[s] outside the law." International Bhd. of Elec. Workers, Local Union No. 474 v. NLRB, 814 F.2d 697, 705 n.24 (D.C. Cir. 1987) (NLRB is bound by court's articulation of the law); accord Taxi Cab Co. of Minnesota, 721 F.2d at 382; Ithaca College v. NLRB, 623 F.2d 224, 228-29 (2d Cir.), cert. denied, 449 U.S. 975 (1980); Allegheny Gen. Hosp. v. NLRB, 608 F.2d 965, 970 (3d Cir. 1979), abrogation on other grounds recognized, St. Margaret Mem'l Hosp. v. NLRB, 991 F.2d 1146, 1152 (1993). The FCC is free to ask (and indeed has asked)6 the Supreme Court to reverse our decision, and it is free to ask the Congress to give it the authority to regulate the intrastate pricing of the local competition provisions we have said it does not now have. But in the absence of reversal or Congressional amendment, the FCC may not reassert its interpretation of section 252(d) or reassert its purported authority to mandate TELRIC pricing schemes for the local competition provisions when our order so clearly denies it that authority.7

^{*} See note 1.

⁷ The FCC also argues that a uniform national pricing scheme would be easier to administer. See Ameritech Order ¶ 286. This additional expediency-based policy argument is similarly precluded by our clear mandate that, under the law, the state commissions have the exclusive authority to determine the price-setting mechanisms.

The FCC's attempt to continue to exercise pricing authority through section 271 is reminiscent of its earlier attempt to do so through section 208. We rejected that attempt in our prior decision. See 120 F.3d at 804. As we noted in our prior opinion, section 2(b) of the Communications Act of 1934, 47 U.S.C. § 152(b), as construed by the Supreme Court in Louisiana Pub. Serv. Comm'n v. FCC, 476 U.S. 355, 370 (1986), fences off intrastate matters from FCC regulation. See Iowa Utils. Bd., 120 F.3d at 796-800. Where there is no unambiguous grant of intrastate authority to the FCC and the impossibility exception to section 2(b) does not apply, section 2(b) prevents "the FCC from intruding on the states' intrastate turf." 120 F.3d at 800. We held in our prior decision, and we reiterate today, that no section or subsection of the Telecommunications Act allows the FCC to break through that fence. We reject not only its attempt to utilize section 271(d)(3)(A), but also its attempt to utilize section 271(d)(3)(C) to accomplish this purpose. The FCC may not accomplish indirectly that which we have held it may not do directly.

D. Relief

The All Writs Act, 28 U.S.C. § 1651(a) (1994), gives federal courts the power to issue writs of mandamus. A federal court's power to utilize mandamus to enforce its prior mandate against an administrative agency is firmly established. See City of Cleveland v. Federal Power Comm'n, 561 F.2d 344, 346 (D.C. Cir. 1977) (directing Federal Power Commission to come into compliance with the court's prior mandate); International Ladies' Garment Workers' Union v. Donovan, 733 F.2d 920, 922-23 (D.C. Cir.) (remanding to district court for additional discovery and determination of whether Secretary of Labor's reimplementation of rules vacated by District of Columbia Circuit violated the mandate, and directing district court to issue writ of mandamus if Secretary's action did violate the mandate), cert. denied, 469 U.S. 820 (1984);

see also Oswald v. McGarr, 620 F.2d 1190, 1196 (7th Cir. 1980) ("Mandamus is appropriate to review compliance with discretionary standards and nondiscretionary commands set forth in an earlier opinion concerning the parties."); Greater Boston Television Corp. v. FCC, 463 F.2d 268, 278 (D.C. Cir. 1971) ("An appellate court likewise has continuing power to accept and pass upon a petition to clarify an outstanding mandate."), cert. denied, 406 U.S. 950 (1972). In City of Cleveland, the District of Columbia Circuit explained:

The decision of a federal appellate court establishes the law binding further action in the litigation by another body subject to its authority. The latter is without power to do anything which is contrary to either the letter or spirit of the mandate construed in the light of the opinion of the court deciding the case, and the higher tribunal is amply armed to rectify any deviation through the process of mandamus. That approach, we have said, may appropriately be utilized to correct a misconception of the scope and effect of the appellate decision. These principles, so familiar in operation within the hierarchy of judicial benches, indulge no exception for reviews of administrative agencies.

561 F.2d at 346 (internal quotations, alterations, and footnotes omitted).

We have not only the power, but also a duty to enforce our prior mandate to prevent evasion. See American Trucking Ass'ns, Inc. v. Interstate Commerce Comm'n, 669 F.2d 957, 961 (5th Cir. 1982) ("Having the power, we also have the duty to clarify the mandate and to direct future compliance with it by mandamus."), cert. denied, 460 U.S. 1022 (1983). Failure to clarify the mandate and direct future compliance where mandamus is the only adequate remedy would "reward bureaucratic misconduct and encourage judicial anarchy." Department of the Navy

v. Federal Labor Relations Auth., 835 F.2d 921, 923 (1st Cir. 1987).

The mandate doctrine is a specific application of the doctrine of law of the case. Our mandate encompasses "everything decided, either expressly or by necessary implication." City of Cleveland, 561 F.2d at 348 (internal quotations omitted). A federal court of appeals can use mandamus to preclude an agency from taking steps to evade the effect of its mandate, even if these steps were not expressly contemplated by the prior decision. For example, in MCI Telecomm. Corp. v. FCC, 580 F.2d 590 (D.C. Cir.), cert. denied, 439 U.S. 980 (1978), the District of Columbia Circuit was asked to enforce its mandate against the FCC and AT&T. The court conceded that AT&T's position was not explicitly precluded by the language of the prior decision, see id. at 595, but nonetheless granted mandamus-type relief, because it found that the FCC position was "clearly inconsistent with the basic themes of our [] decision" and "deliberately frustrates the purpose of the litigation . . . and the intended effect of our decree." Id. at 597; see also id. at 595.

Respondents correctly point out that this court declines to grant mandamus relief unless there is "no other adequate alternative administrative or judicial remedy." See In re Lane, 801 F.2d 1040, 1042 (8th Cir. 1986). In American Trucking Ass'ns, the Fifth Circuit clarified that a remedy is not "adequate," if it unduly burdens the aggrieved party. It noted that repeated litigation in "scores of cases" might eventually lead to resolution of the matter before it, but held that this alternative remedy was not adequate. See 669 F.2d at 961; see also Department of the Navy, 835 F.2d at 923 (requiring substantial relitigation of issues already decided would not constitute adequate alternative remedy).

The FCC's choice to promulgate its policy decision not in rules or regulations, but rather in an advisory opinion appended to a section 271 order was, in our view, clearly calculated so as to evade ordinary appellate review. We are concerned that the advisory nature of the portion which contradicts our mandate may render it unreviewable on direct appeal. We are also concerned by the fact that the offensive portion of the FCC's Order has, by its own terms, nothing to do with the actual denial of Ameritech's application—we suspect that this naked policy statement was added to the Ameritech Order in an attempt to forum-shop. Having lost in its bid to usurp the power to determine intrastate prices in the Eighth Circuit, the FCC now seeks to have another bite at the apple in the District of Columbia Circuit.

This is the type of "evasion" that necessitates mandamus relief. The FCC's advisory opinion is clearly calculated to have a chilling effect on the state commissions' employment of non-TELRIC pricing schemes, and to do so in a way that avoids our review. It is a plain-faced reassertion of section 252(d) pricing authority over the local competition provisions of the Act by the FCC in clear violation of our mandate, and it therefore triggers our inherent jurisdiction to enforce our mandate.

Respondents argue that we can take no action with regard to the Ameritech Order, because jurisdiction over section 271 disputes is given exclusively to the District of Columbia Circuit. Although we have noted that the offensive portion of the Ameritech Order was not used as a reason for denying Ameritech's section 271 application, we conclude that we do not need to reach this question. The FCC specifically stated that it was not deciding whether Ameritech had satisfied the requirements of section 252(d). The FCC was simply using the advisory portion of its order as a vehicle by which it could intimidate state commissions into complying with the substance of the rules we vacated in our July 18 decision. If this intimidation tactic is successful, a case or controversy will never arise to challenge its validity, because all states will be forced to adopt the FCC determined pricing schemes.

The harm we wish to address is therefore entirely prospective: we seek to assure state commissions that the pricing authority granted to them under section 252 is not eviscerated. Since the harm we seek to remedy is entirely prospective, we believe that a forward-looking remedy will suffice.

We therefore leave the FCC's Ameritech Order untouched. However, we grant mandamus to enforce our mandate in order to disabuse the FCC of the mistaken notion that it has the power to enforce the pricing policy judgment articulated in paragraphs 280-297 of the Order. We order the FCC to apply section 252(d) in the context of section 271 as our Iowa Utils. Bd. decision requires. In other words, we order the FCC to cease and desist from attempting to give effect to its interpretation of the substantive requirements of section 252(d). We order the FCC to confine its pricing role under section 271(d)(3)(A) to determining whether applicant BOCs have complied with the pricing methodology and rules adopted by the state commissions and in effect in the respective states in which such BOCs seek to provide inregion, interLATA services. The FCC has no authority under section 271(d)(3)(A) or section 271(d)(3)(C) to issue rules, regulations, orders, policy statements, or any other genre of opinions regarding how the local competition provisions of the Act involving interconnection,

^{*}The remedy we grant today is not unlike the remedy granted by the Fifth Circuit in American Trucking Ass'ns, 669 F.2d at 957. There the court issued mandamus in response to the Interstate Commerce Commission's (ICC's) continued application of a rule the Fifth Circuit had found to be invalid. There, as here, the agency had regulated beyond the scope of its statutory authority. Like the FCC in the case at hand, the ICC continued to impose the substance of the rule in various separate individual administrative adjudications, notwithstanding the mandate of the court of appeals. The Fifth Circuit granted petitioners' request that it issue a writ of mandamus ordering the ICC to "comply in all pending actions before it with the full scope of this Court's opinion." Id. at 960 (internal quotes omitted).

unbundled access, resale, or transport and termination of traffic should be priced.

The motions to enforce the mandate are granted.

A true copy.

Attest.

Clerk, U.S. Court of Appeals, Eighth Circuit.

UNITED STATES COURT OF APPEALS FOR THE EIGHTH CIRCUIT

Nos. 96-3321/3406/3410/3414/3416/3418/3424/3430/3436/3444/3450/3453/3460/3507/3519/3520/3603/3608/3696/3708/3709/3756/3901/3906/3982

IOWA UTILITIES BOARD,

Petitioner,

BELL ATLANTIC CORPORATION, et al., Intervenors on Appeal,

VS.

FEDERAL COMMUNICATIONS COMMISSION; UNITED STATES OF AMERICA,

Before BOWMAN, WOLLMAN, HANSEN, Circuit Judges.

Filed: January 22, 1998

WRIT OF MANDAMUS

To the Federal Communications Commission:

In accordance with the order of the United States Court of Appeals for the Eighth Circuit herein delivered, the Federal Communications Commission is hereby ordered to obey the Court's October 14, 1997, mandate in Appeal No. 96-3321, Iowa Utilities Board v. Federal Communica-

tions Commission. The Federal Communications Commission is ordered to apply section 252(d) of the Telecommunications Act of 1996 in the context of section 271 as the Court's decision in *Iowa Utils. Bd. v. FCC*, 120 F.3d 753 (8th Cir. 1997) requires. It is further ordered that the Federal Communications Commission cease and desist from attempting to give effect to its interpretation of the substantive requirements of section 252(d) of the Act. The Federal Communications Commission is ordered to confine its pricing role under section 271(d)(3)(A) to determining whether applicant BOCs have complied with the pricing methodology and rules adopted by the state commissions and in effect in the respective states in which such BOCs seek to provide in-region, interLATA services.

It is so ordered.

A true copy.

Attest.

Clerk, U.S. Court of Appeals, Eighth Circuit.